

Big Maths Beat That!: Teacher Notes

SAFE Challenge 12			
	Step Location in the SAFE framework		Title of Step
	Progress Drive	Step No.	
Q1	Amounts: Amounts of Time	22	I know how many days in each month, year and leap year
Q2	Amounts: Amounts of Time: Telling the Time	9	I can say how long until o'clock
Q3	Amounts: Amounts of Time: Telling the Time	11	I can tell the time to the nearest minute
Q4	Amounts: Amounts of Time: Telling the Time	15	I can convert time from analogue to 24-hour clock
Q5	Amounts: Amounts of Turn	13	I can use acute and obtuse to accurately describe properties of shapes
Q6	Fractions: Fractions of a Whole	14	I know any fraction equal to 1
Q7	Fractions: Fractions of a Set	9	I can find fractions of amounts using my tables (1 part)
Q8	Fractions: Fractions of a Set	10	I can find fractions of amounts using my tables (2 or more parts)
Q9	Fractions: Fractions: Calculation	2	I can solve addition calculations with fractions
		3	I can solve subtraction calculations with fractions
Q10	Dangerous Maths: Algebra	4	I can use a two-step function machine

NAME:

CLASS:

DATE:

SAFE 12

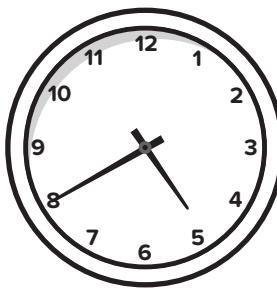
WK: 1

/10

1

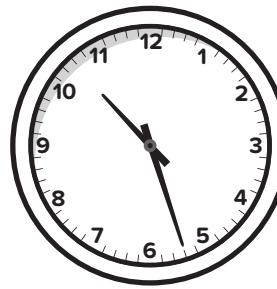
How many days are in January? _____ days

2



5 to 5
 20 past 8
 20 to 5

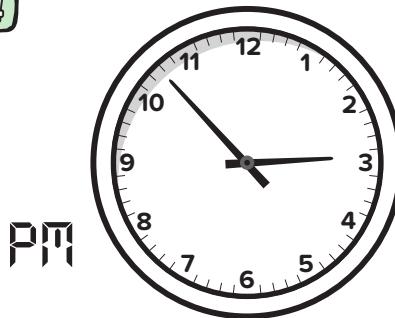
3



Write this time on the digital clock

: :

4

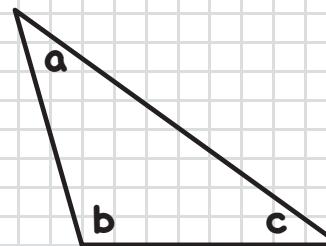


PM

Write this time on the digital clock using 24 hour notation

: :

5



Which angle is obtuse?

6

Which fraction is equal to 1?

$$\frac{4}{5} \quad \frac{11}{11} \quad \frac{11}{10}$$

7

$$\frac{1}{4} \text{ of } 24 =$$

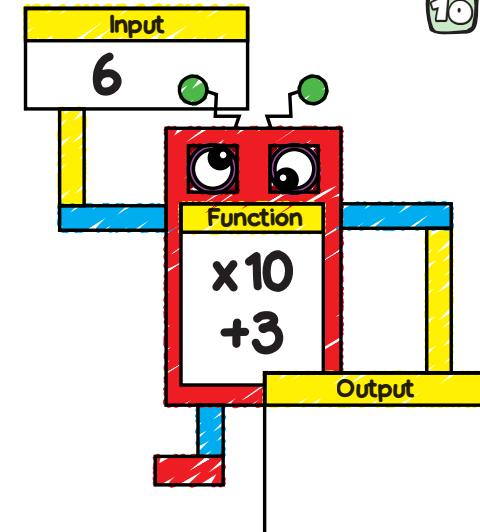
8

$$\frac{3}{4} \text{ of } 24 =$$

9

$$\frac{3}{8} + 4 + \frac{2}{8} =$$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

NAME:

CLASS:

DATE:

SAFE 12

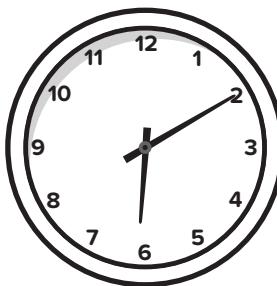
WK: 2

/10

1

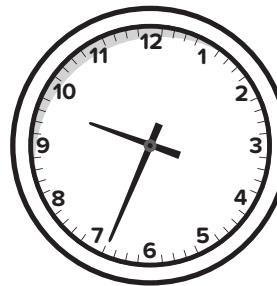
How many days are in March? _____ days

2



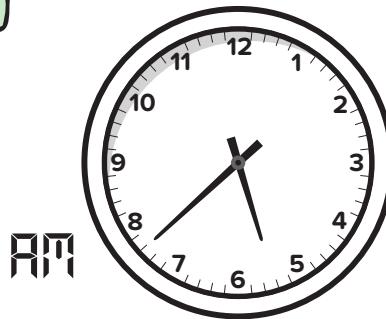
- 10 to 2
- 10 past 6
- 15 to 4

3



Write this time on the digital clock

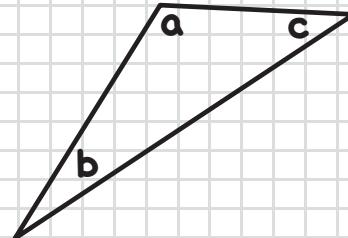
4



AM

Write this time on the digital clock using 24 hour notation

5



Which angle is obtuse?

6

Which fraction is equal to 1?

$$\frac{6}{7} \quad \frac{5}{8} \quad \frac{9}{9}$$

7

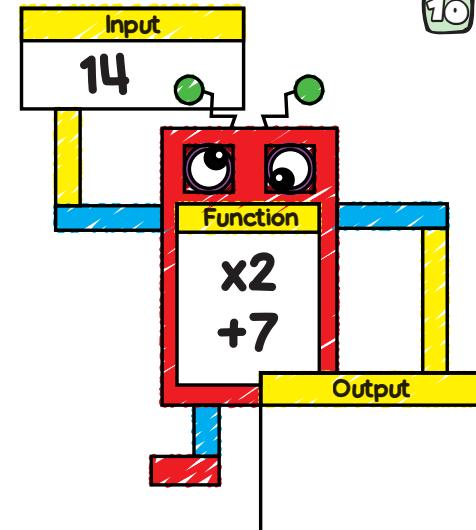
$$\frac{1}{3} \text{ of } 18 =$$

8

$$\frac{2}{3} \text{ of } 21 =$$

$$\frac{1}{7} + 2 + \frac{4}{7} =$$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

NAME:

CLASS:

DATE:

SAFE 12

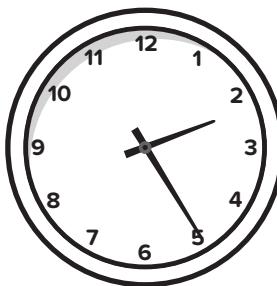
WK: 3

/10

1

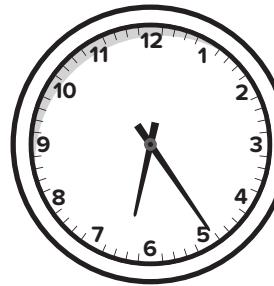
How many days are in a year? _____ days

2



25 past 2
 20 past 3
 10 to 9

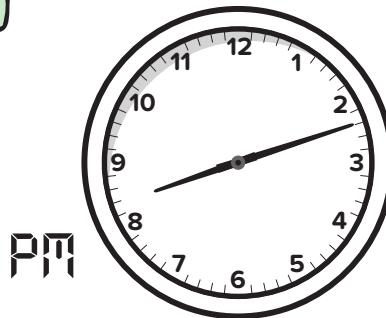
3



Write this time on the digital clock

: :

4

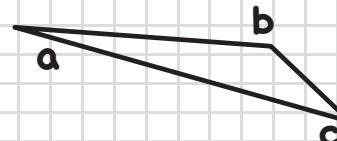


PM

Write this time on the digital clock using 24 hour notation

: :

5



Which angle is obtuse?

6

Which fraction is equal to 1?

$$\frac{8}{8} \quad \frac{10}{12} \quad \frac{4}{11}$$

7

$$\frac{1}{4} \text{ of } 36 =$$

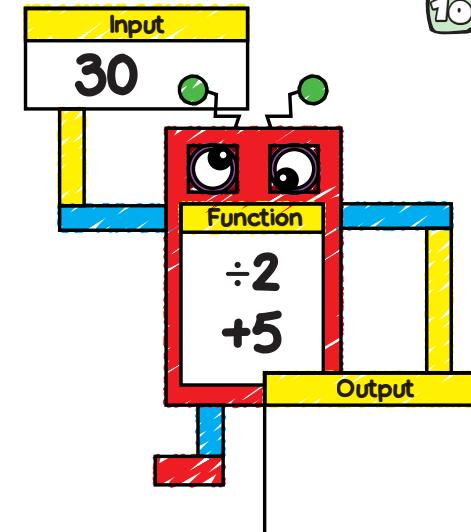
8

$$\frac{3}{4} \text{ of } 32 =$$

9

$$\frac{1}{9} + \frac{4}{9} + \frac{2}{9} =$$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

NAME:

CLASS:

DATE:

SAFE 12

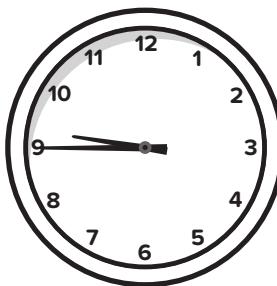
WK:4

/10

1

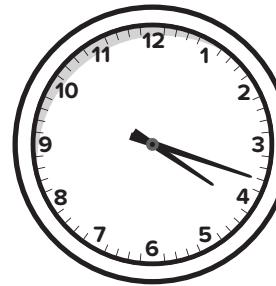
How many days are in September? _____ days

2



15 to 6
 15 past 9
 15 to 10

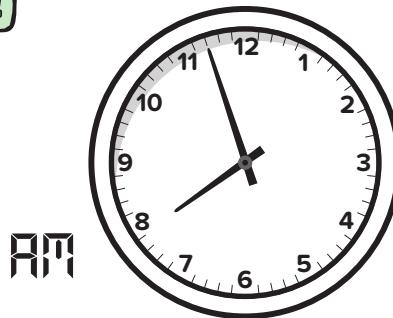
3



Write this time on the digital clock

: :

4

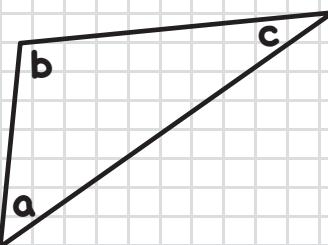


AM

Write this time on the digital clock using 24 hour notation

: :

5



Which angle is obtuse?

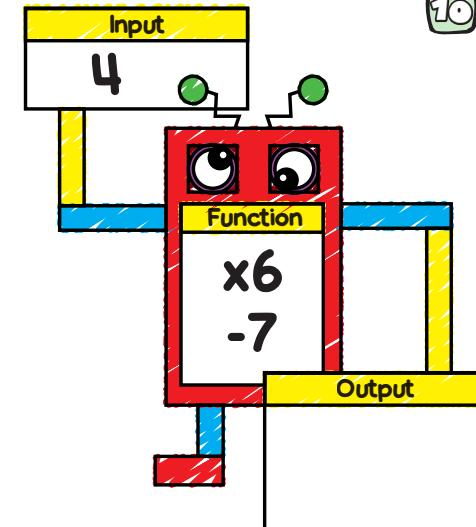
8

$$\frac{2}{3} \text{ of } 27 =$$

9

$$\frac{2}{9} + \frac{2}{9} + \frac{4}{9} =$$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

NAME:

CLASS:

DATE:

SAFE 12

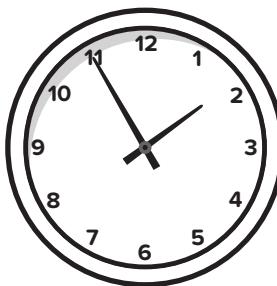
WK:5

/10

1

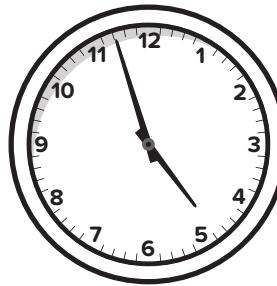
How many days are in May? _____ days

2



20 to 7
 10 past 3
 5 to 2

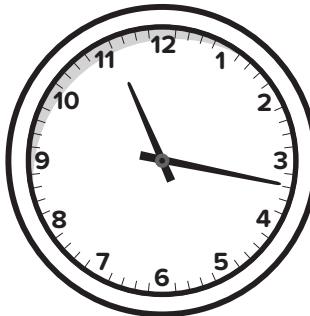
3



Write this time on the digital clock

: :

4

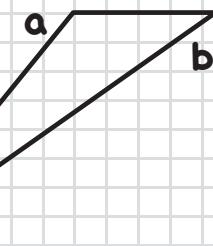


AM

Write this time on the digital clock using 24 hour notation

: :

5



Which angle is obtuse?

6

Which fraction is equal to 1?

$$\frac{11}{17} \quad \frac{2}{6} \quad \frac{7}{7}$$

7

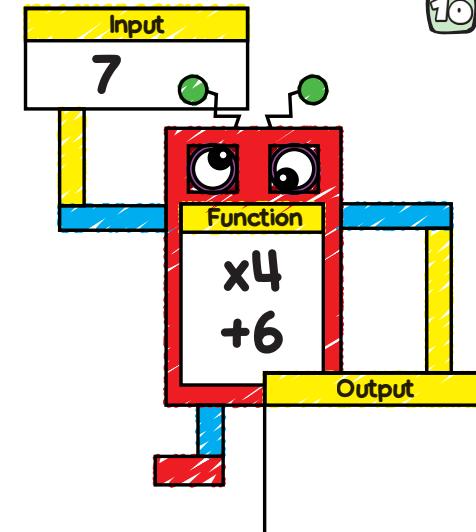
$$\frac{1}{4} \text{ of } 16 =$$

8

$$\frac{2}{4} \text{ of } 12 =$$

$$\frac{1}{5} + 4 + \frac{2}{5} =$$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

NAME:

CLASS:

DATE:

SAFE 12

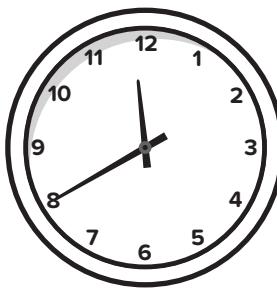
WK: 6

/10

1

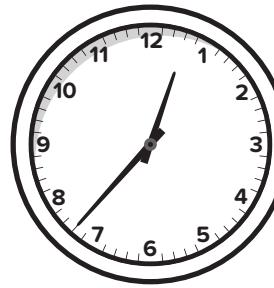
How many days are in June? _____ days

2



20 to 7
 20 past 3
 20 to 12

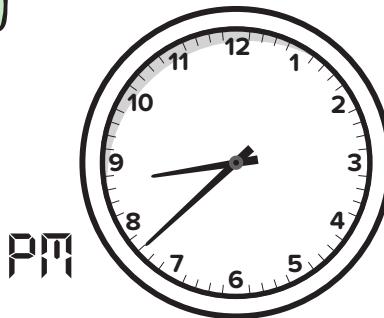
3



Write this time on the digital clock

: :

4

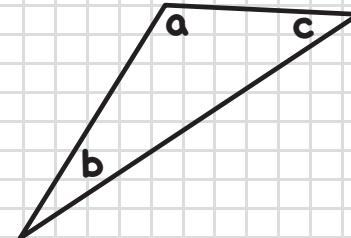


PM

Write this time on the digital clock using 24 hour notation

: :

5



Which angle is obtuse?

6

Which fraction is equal to 1?

$$\frac{16}{16} \quad \frac{4}{5} \quad \frac{6}{8}$$

7

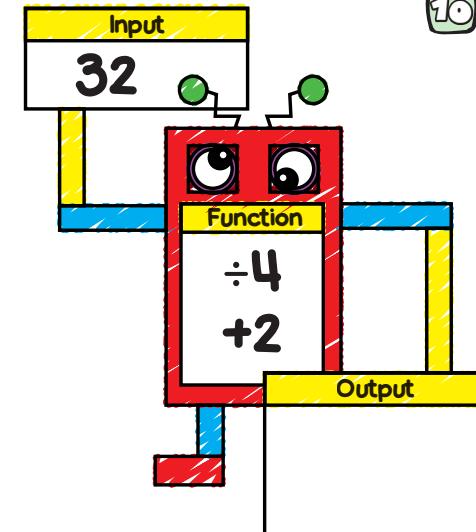
$$\frac{1}{3} \text{ of } 9 =$$

8

$$\frac{2}{3} \text{ of } 15 =$$

$$\frac{6}{7} - \frac{4}{7} - \frac{1}{7} =$$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

NAME:

CLASS:

DATE:

SAFE 12

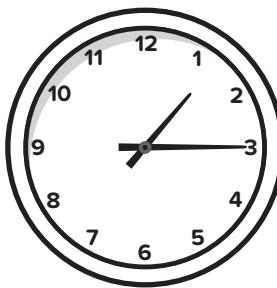
WK: 7

/10

1

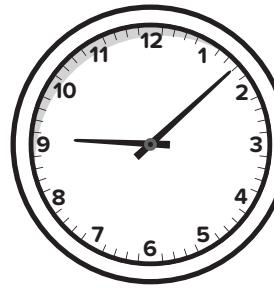
How many days are in a leap year? _____ days

2



15 to 7
 15 past 1
 20 to 9

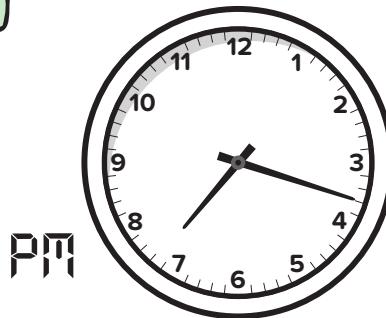
3



Write this time on the digital clock

: :

4

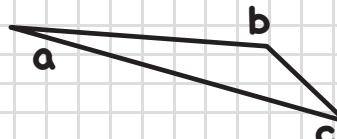


PM

Write this time on the digital clock using 24 hour notation

: :

5



Which angle is obtuse?

6

Which fraction is equal to 1?

$$\frac{4}{9} \quad \frac{6}{6} \quad \frac{2}{12}$$

7

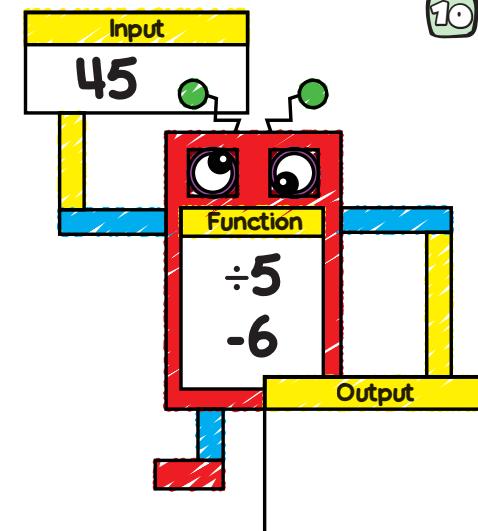
$$\frac{1}{4} \text{ of } 20 =$$

8

$$\frac{3}{4} \text{ of } 36 =$$

$$\frac{2}{8} + \frac{2}{8} + \frac{1}{8} =$$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

NAME:

CLASS:

DATE:

SAFE 12

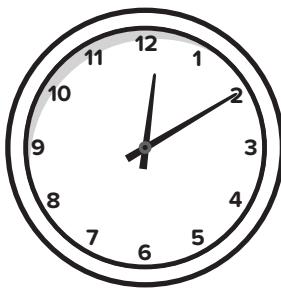
WK: 8

/10

1

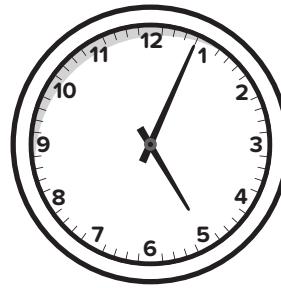
How many days are in October? _____ days

2



20 to 11
 10 past 12
 5 to 6

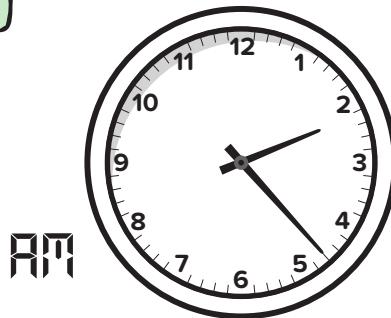
3



Write this time on the digital clock

: :

4

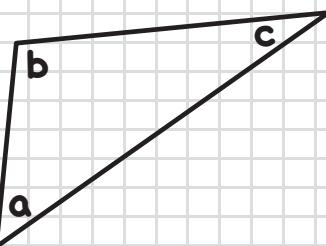


AM

Write this time on the digital clock using 24 hour notation

: :

5



Which angle is obtuse?

6

Which fraction is equal to 1?

$$\frac{3}{4} \quad \frac{3}{7} \quad \frac{8}{8}$$

7

$$\frac{1}{4} \text{ of } 8 =$$

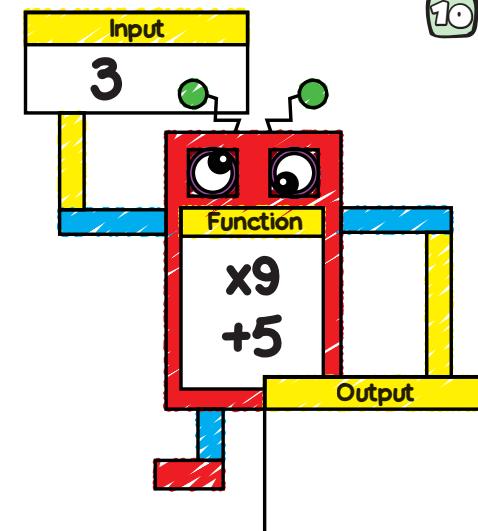
8

$$\frac{2}{3} \text{ of } 18 =$$

9

$$8 + \frac{4}{9} + \frac{2}{9} =$$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

NAME:

CLASS:

DATE:

SAFE 12

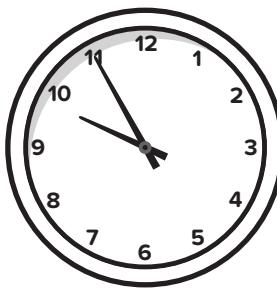
WK:9

/10

1

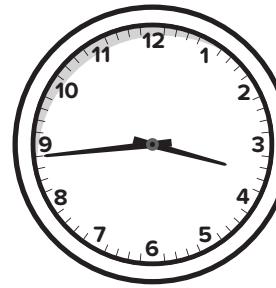
How many days are in April? _____ days

2



- 10 to 6
- 10 past 5
- 5 to 10

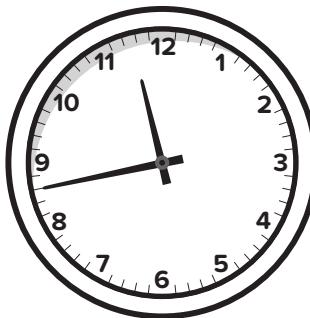
3



Write this time on the digital clock

: :

4

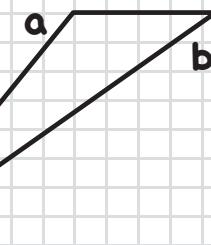


PM

Write this time on the digital clock using 24 hour notation

: :

5



Which angle is obtuse?

6

Which fraction is equal to 1?

$$\frac{12}{12} \quad \frac{2}{9} \quad \frac{1}{5}$$

7

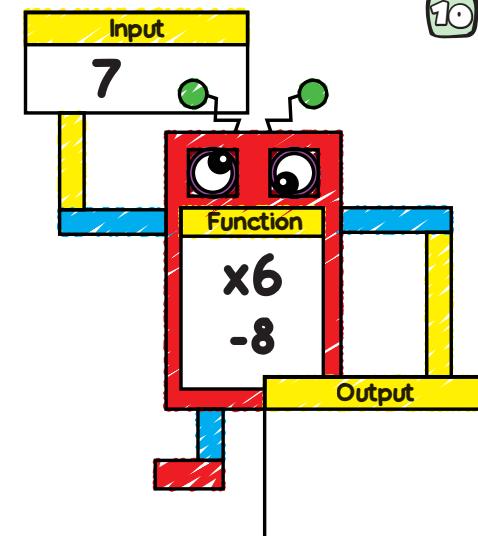
$$\frac{1}{3} \text{ of } 6 =$$

8

$$\frac{3}{4} \text{ of } 32 =$$

$$\frac{2}{6} + \frac{1}{6} + \frac{2}{6} =$$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

NAME:

CLASS:

DATE:

SAFE 12

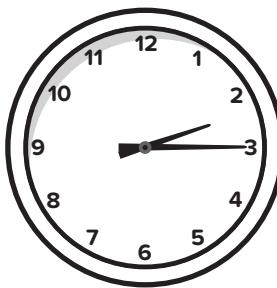
WK: 10

/10

1

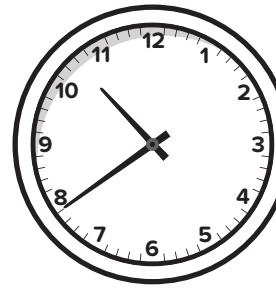
How many days are in February? _____ days

2



15 past 2
 10 past 9
 20 to 3

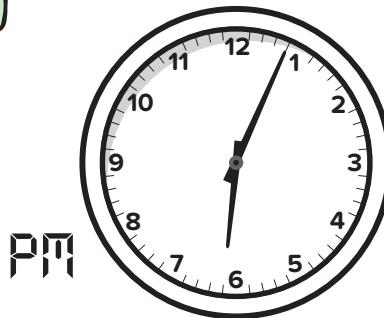
3



Write this time on the digital clock

: :

4

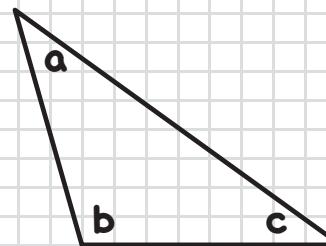


PM

Write this time on the digital clock using 24 hour notation

: :

5



Which angle is obtuse?

6

Which fraction is equal to 1?

$$\frac{4}{6} \quad \frac{15}{15} \quad \frac{3}{11}$$

7

$$\frac{1}{4} \text{ of } 12 =$$

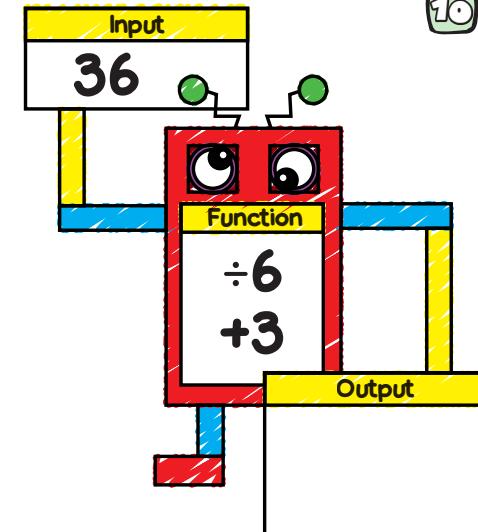
8

$$\frac{2}{3} \text{ of } 21 =$$

9

$$2 + \frac{4}{8} + \frac{2}{8} =$$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

ANSWERS

SAFE 12

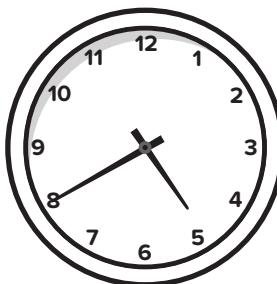
WK:1

10

1

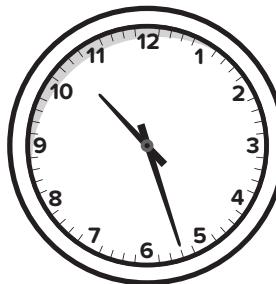
How many days are in January? 31 days

2



- 5 to 5
- 20 past 8
- 20 to 5

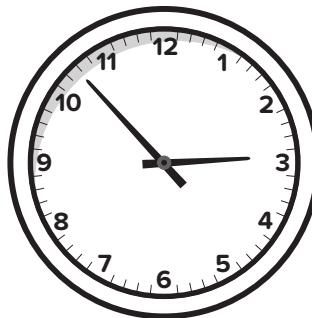
3



Write this time on the digital clock

10:27

4

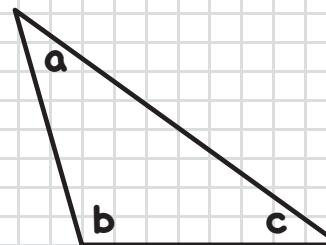


PM

Write this time on the digital clock using 24 hour notation

10:53

5



Which angle is obtuse?

b

6

Which fraction is equal to 1?

$$\frac{4}{5}$$

$$\frac{11}{11}$$

$$\frac{11}{10}$$

7

$$\frac{1}{4} \text{ of } 24 =$$

6

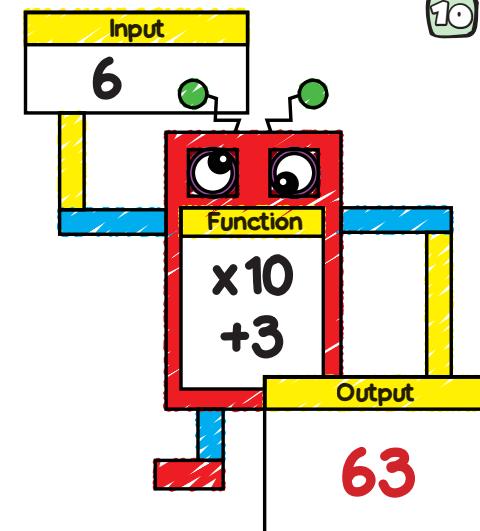
8

$$\frac{3}{4} \text{ of } 24 = 18$$

9

$$\frac{3}{8} + 4 + \frac{2}{8} = 4 \frac{5}{8}$$

10



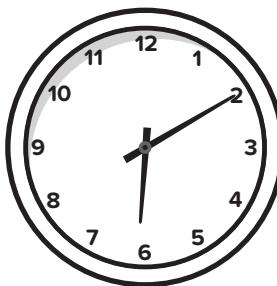
MY LAST SCORE?!

HAVE I BEAT THAT?!

1

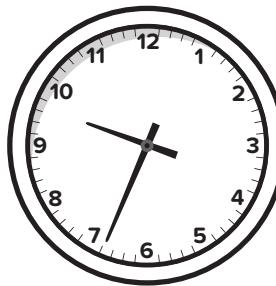
How many days are in March? 31 days

2



10 to 2
 10 past 6
 15 to 4

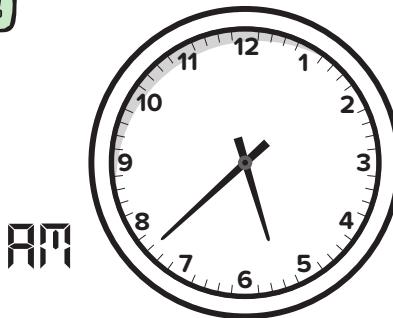
3



Write this time on the digital clock

09:34

4

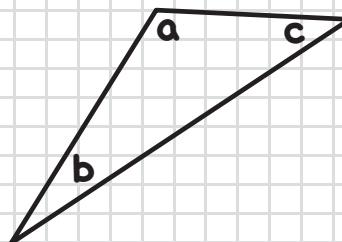


AM

Write this time on the digital clock using 24 hour notation

05:38

5



Which angle is obtuse?

a

6

Which fraction is equal to 1?

$$\frac{6}{7} \quad \frac{5}{8} \quad \boxed{\frac{9}{9}}$$

7

$$\frac{1}{3} \text{ of } 18 =$$

6

8

$$\frac{2}{3} \text{ of } 21 =$$

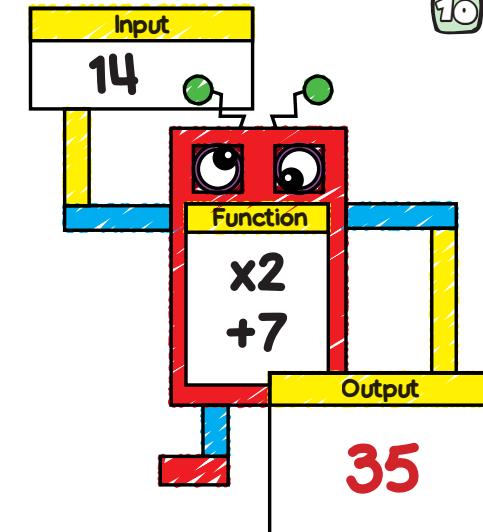
14

9

$$\frac{1}{7} + 2 + \frac{4}{7} =$$

2 $\frac{5}{7}$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

ANSWERS

SAFE 12

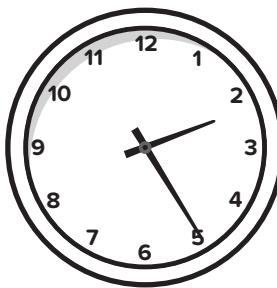
WK:3

/10

1

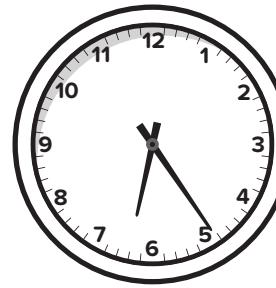
How many days are in a year? 365 days

2



- 25 past 2
- 20 past 3
- 10 to 9

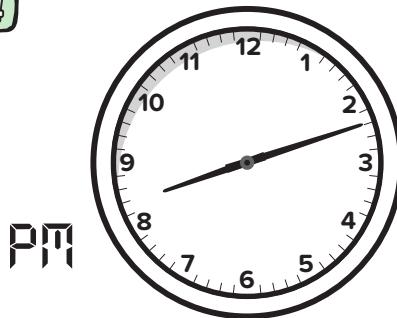
3



Write this time on the digital clock

06:24

4

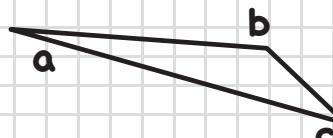


PM

Write this time on the digital clock using 24 hour notation

20:05

5



Which angle is obtuse?

b

6

Which fraction is equal to 1?

$\frac{8}{8}$	$\frac{10}{12}$	$\frac{4}{11}$
---------------	-----------------	----------------

7

$$\frac{1}{4} \text{ of } 36 = 9$$

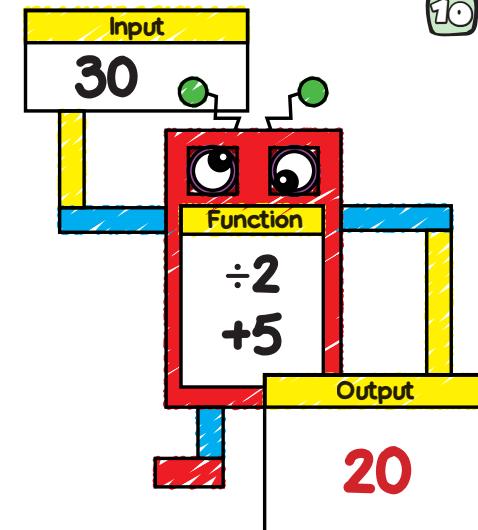
8

$$\frac{3}{4} \text{ of } 32 = 24$$

9

$$\frac{1}{9} + \frac{4}{9} + \frac{2}{9} = \frac{7}{9}$$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

ANSWERS

SAFE 12

WK:4

/10

1

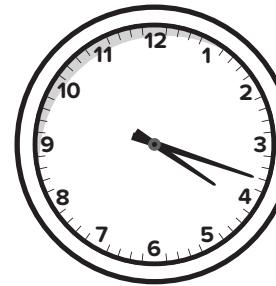
How many days are in September? 30 days

2



- 15 to 6
- 15 past 9
- 15 to 10

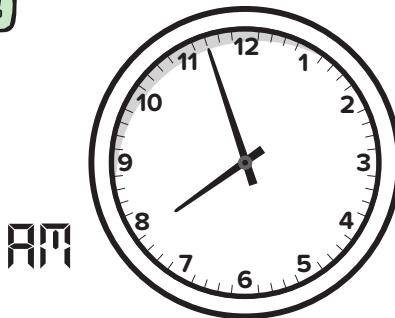
3



Write this time on the digital clock

04:05

4

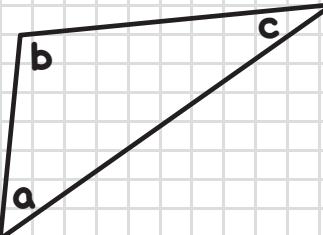


AM

Write this time on the digital clock using 24 hour notation

07:52

5



Which angle is obtuse?

b

6

Which fraction is equal to 1?

$$\frac{13}{15}$$

$$\frac{13}{13}$$

$$\frac{3}{9}$$

7

$$\frac{1}{3} \text{ of } 12 =$$

4

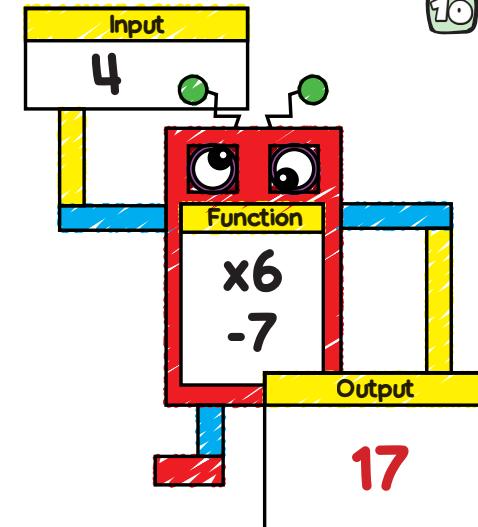
8

$$\frac{2}{3} \text{ of } 27 = 18$$

9

$$\frac{2}{9} + \frac{2}{9} + \frac{4}{9} = \frac{8}{9}$$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

ANSWERS

SAFE 12

WK:5

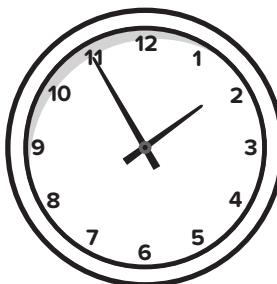
/10

1

How many days are in May?

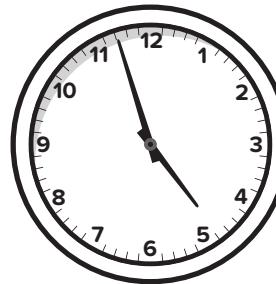
31 days

2



- 20 to 7
- 10 past 3
- 5 to 2

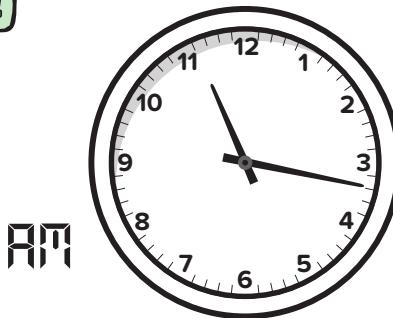
3



Write this time on the digital clock

04:50

4

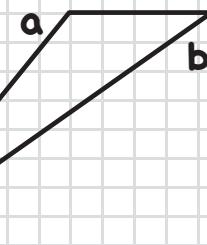


AM

Write this time on the digital clock using 24 hour notation

01:15

5



Which angle is obtuse?

a

6

Which fraction is equal to 1?

$$\frac{11}{17} \quad \frac{2}{6} \quad \boxed{\frac{7}{7}}$$

7

$$\frac{1}{4} \text{ of } 16 =$$

4

8

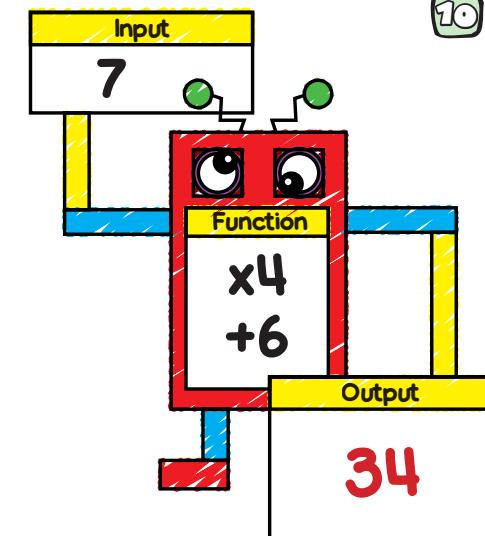
$$\frac{2}{4} \text{ of } 12 =$$

6

$$\frac{1}{5} + 4 + \frac{2}{5} =$$

4 $\frac{3}{5}$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

ANSWERS

SAFE 12

WK 6

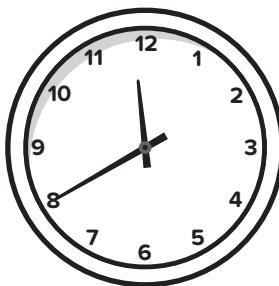
10

1

How many days are in June?

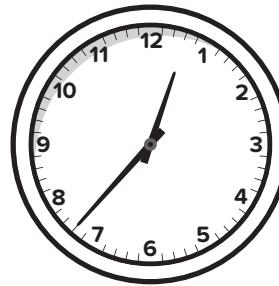
30 days

2



- 20 to 7
- 20 past 3
- 20 to 12

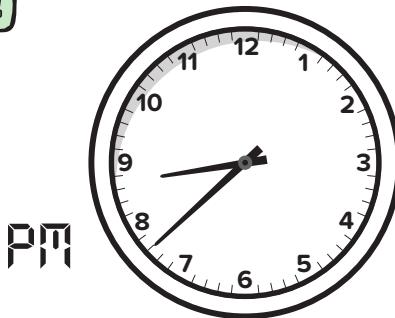
3



Write this time on the digital clock

12:37

4

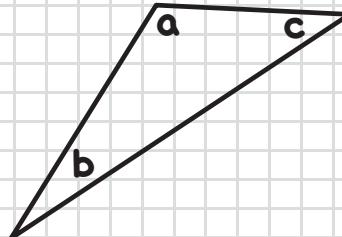


PM

Write this time on the digital clock using 24 hour notation

20:38

5



Which angle is obtuse?

a

6

Which fraction is equal to 1?

$$\frac{16}{16}$$

$$\frac{4}{5}$$

$$\frac{6}{8}$$

7

$$\frac{1}{3} \text{ of } 9 =$$

3

8

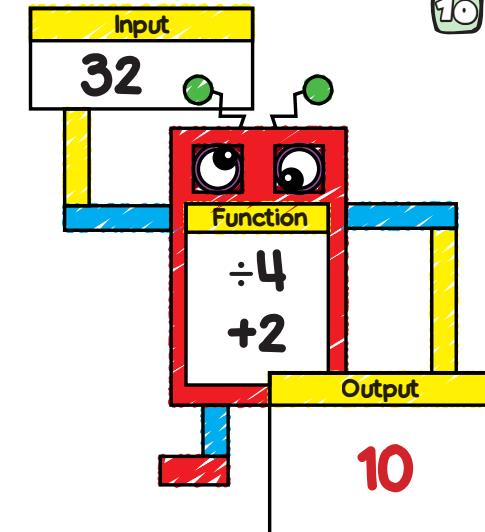
$$\frac{2}{3} \text{ of } 15 =$$

10

$$\frac{6}{7} - \frac{4}{7} - \frac{1}{7} =$$

$\frac{1}{7}$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

ANSWERS

SAFE 12

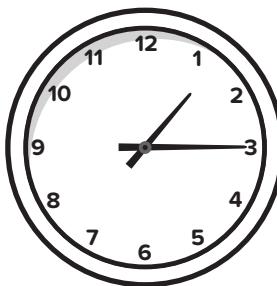
WK: 7

/10

1

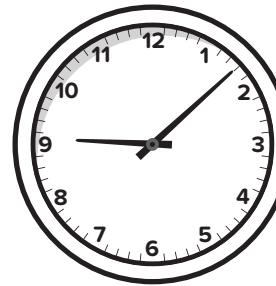
How many days are in a leap year? 366 days

2



- 15 to 7
- 15 past 1
- 20 to 9

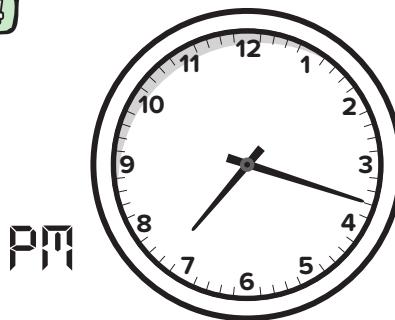
3



Write this time on the digital clock

09:08

4

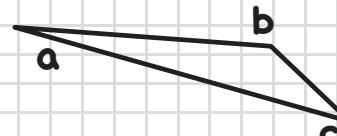


PM

Write this time on the digital clock using 24 hour notation

19:18

5



Which angle is obtuse?

b

6

Which fraction is equal to 1?

$$\frac{4}{9}$$

$$\frac{6}{6}$$

$$\frac{2}{12}$$

7

$\frac{1}{4}$ of 20 =

5

8

$\frac{3}{4}$ of 36 =

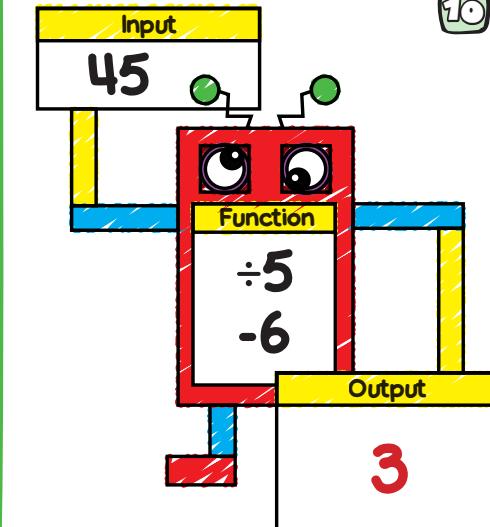
27

9

$\frac{2}{8} + \frac{2}{8} + \frac{1}{8} =$

$\frac{5}{8}$

10



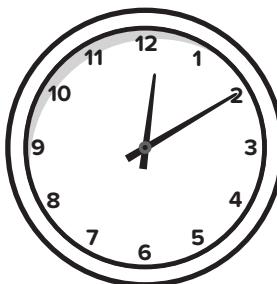
MY LAST SCORE?!

HAVE I BEAT THAT?!

1

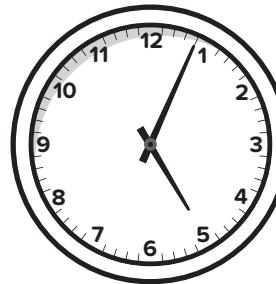
How many days are in October? 31 days

2



20 to 11
 10 past 12
 5 to 6

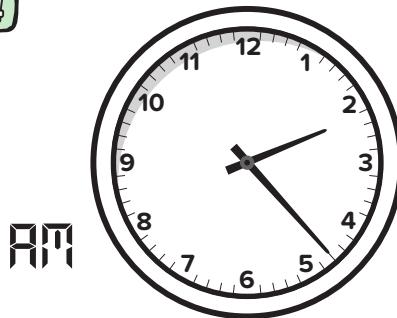
3



Write this time on the digital clock

05:04

4

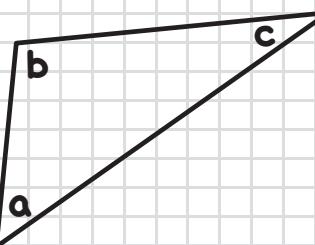


AM

Write this time on the digital clock using 24 hour notation

02:23

5



Which angle is obtuse?

b

6

Which fraction is equal to 1?

$$\frac{3}{4}$$

$$\frac{3}{7}$$

$$\frac{8}{8}$$

7

$$\frac{1}{4} \text{ of } 8 =$$

2

8

$$\frac{2}{3} \text{ of } 18 =$$

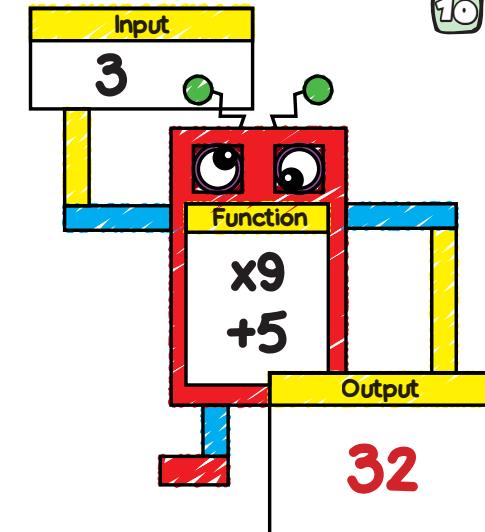
12

9

$$8 + \frac{4}{9} + \frac{2}{9} =$$

8 $\frac{6}{9}$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

ANSWERS

SAFE 12

WK:9

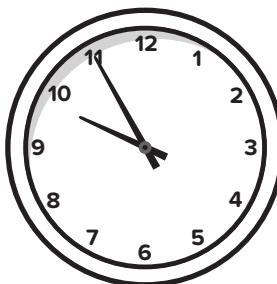
10

1

How many days are in April?

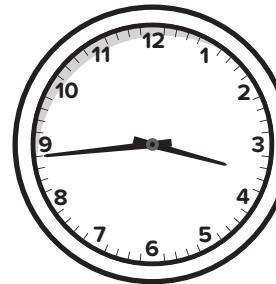
30 days

2



- 10 to 6
- 10 past 5
- 5 to 10

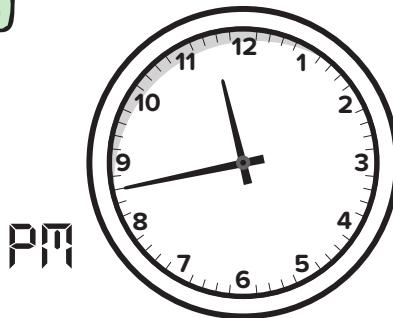
3



Write this time on the digital clock

03:44

4

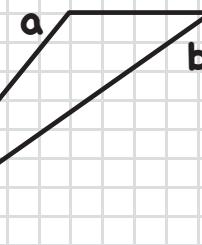


PM

Write this time on the digital clock using 24 hour notation

23:43

5



Which angle is obtuse?

a

6

Which fraction is equal to 1?

$\frac{12}{12}$ $\frac{2}{9}$ $\frac{1}{5}$

7

$\frac{1}{3}$ of 6 = 2

8

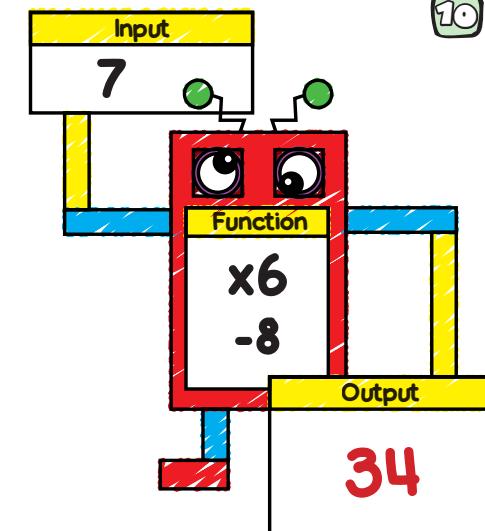
$\frac{3}{4}$ of 32 =

24

$\frac{2}{6} + \frac{1}{6} + \frac{2}{6} =$

$\frac{5}{6}$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!

ANSWERS

SAFE 12

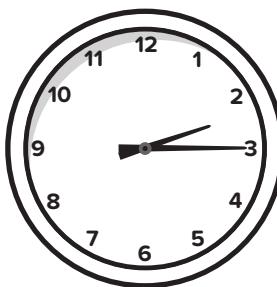
WK:10

10

1

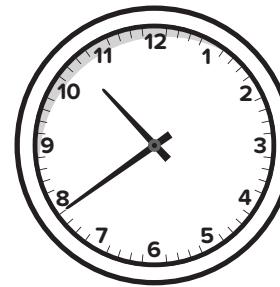
How many days are in February? 28 days

2



- 15 past 2
- 10 past 9
- 20 to 3

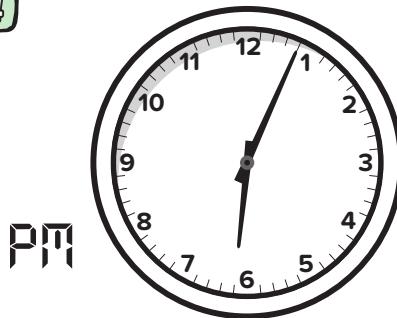
3



Write this time on the digital clock

10:39

4

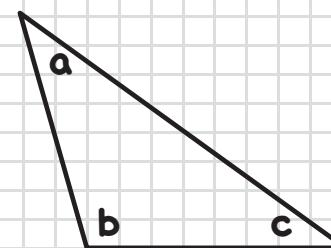


PM

Write this time on the digital clock using 24 hour notation

18:04

5



Which angle is obtuse?

b

6

Which fraction is equal to 1?

$$\frac{4}{6}$$

$$\frac{15}{15}$$

$$\frac{3}{11}$$

7

$$\frac{1}{4} \text{ of } 12 =$$

3

8

$$\frac{2}{3} \text{ of } 21 =$$

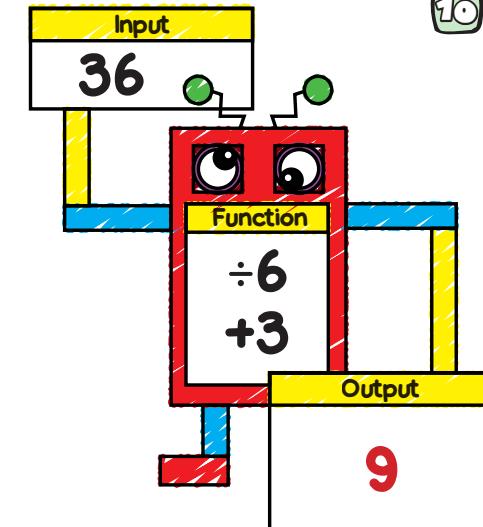
14

9

$$2 + \frac{4}{8} + \frac{2}{8} =$$

2 $\frac{6}{8}$

10



MY LAST SCORE?!

HAVE I BEAT THAT?!