YEAR 7 NUMERACY – SET 6

Answer these questions without using a calculator.

Name .... **Date** ....

1 The area of this rectangle is 112 cm^2 and its width is 8 cm.
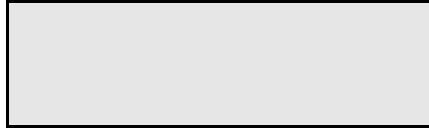
The perimeter of this rectangle

is
- ◯ **14 cm**
- ◯ **22 cm**
- ◯ **44 cm**
- ◯ **56 cm**

2 A number is multiplied by the number 3 less than itself.
The result is 54.
The number is

6	**9**	**18**	**30**
◯	◯	◯	◯

3 If these fractions are ordered from smallest to largest, which one is **second** on the list?

$\frac{3}{4}$ $\frac{3}{5}$ $\frac{7}{10}$ $\frac{2}{3}$

◯ ◯ ◯ ◯

4 When $z = 4$, $t = 17$ and when $t = 5$, $z = 2$.
Which one of these rules relates the values of z and $t?$

$t = 4 \times z + 1$ $z = (t + 3) \div 5$ $6 \times z - 7 = t$ $21 - t = z$

◯   ◯   ◯   ◯

5 A set of cards that has the multiples of 3 written on them, begins with 3 and ends with 36.
Without looking, Bill takes a card.
What is the chance that Bill's card contains the digit "2" in its number?

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6 The ratio of red kangaroos to grey kangaroos in a wilderness area is 3:7.
The total number of kangaroos in the area is 210.
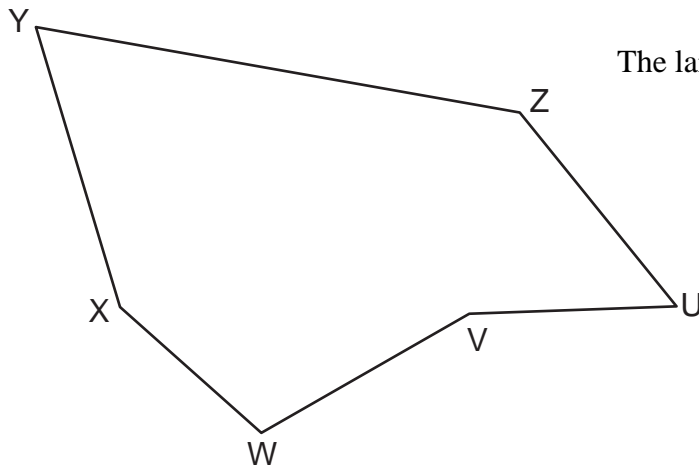How many **more** grey kangaroos are there in the wilderness area than red kangaroos?

63	70	84	147
⬭	⬭	⬭	⬭

7

The largest angle inside this hexagon is at

⬭ **V**

⬭ **W**

⬭ **X**

⬭ **Z**

8 On average, grey seals sleep for 6.2 hours each day.
The fraction of each day an average grey seal spends **awake** is closest to

⬭ one-sixth.
⬭ two-thirds.
⬭ one-quarter.
⬭ three-quarters.