

Number Nest Weekly Challenge



Warm up

- a) What is 132 divided by -12?
- b) Subtract seven squared from twelve squared.
- c) What is negative six cubed multiplied by negative one?
- d) Round 1.0067 and 2.3015 to 3 significant figures.

Main challenge

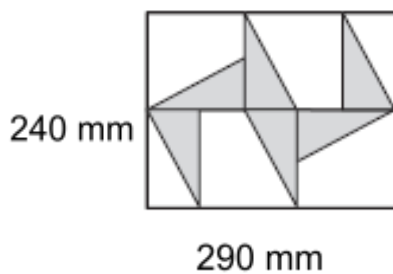
1. A group of six numbers has a mean of -3, what is the new mean when -10 is added to the group of numbers?

Remember - The mean is an average. To find the mean, add all the numbers together then divide by the number of numbers.

2. Albert has ridden his bike for 2 hours and 40 minutes at 18 miles per hour. How many miles has Albert cycled?

3. Olivia the otter eats 2 clams for every 5 fishes. Olivia ate 91 clams and fishes altogether, how many fishes did she eat?

4. Six identical right-angled triangles fit inside a rectangle as shown in the diagram. The rectangle measures 240 mm by 290 mm. What is the total shaded area in cm^2 ?



Bonus

Twelve points are arranged as shown on the right. How many rectangles (including squares) can be made by joining four of these points?

