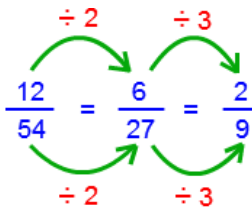


FRACTIONS

Types of Fractions

Proper Fractions: $\frac{8}{12}$
 Improper Fractions: $\frac{18}{10}$
 Mixed Numbers: $6\frac{1}{5}$

Simplify Fractions



Multiplying Fractions

$$\frac{1}{4} \times \frac{2}{5} = \frac{1 \times 2}{4 \times 5} = \frac{2}{20} = \frac{1}{10}$$

Dividing Fractions

$$\frac{3}{4} \div \frac{2}{5} = \frac{3}{4} \times \frac{5}{2} = \frac{15}{8} = 1\frac{7}{8}$$

$$\frac{4}{5} \text{ of } \text{£}50 = \frac{4}{5} \times \text{£}50 = \frac{4}{5} \times \frac{50}{1} = \frac{4}{1} \times \frac{10}{1} = \text{£}40$$

DIVISION

Divide 417 by 3.

417 ÷ 3 is set out as:

$$\begin{array}{r} 139 \\ 3 \overline{)417} \end{array}$$

Divide 3684 ÷ 18.

This is same as dividing 3684 by 6 first and then 3.

NUMBER

Square Numbers

1, 4, 9, 16, 25, 36, 49, 64, 81, 100...

Cube Numbers

1, 8, 27, 64, 125, 216, 343, 512...

$$52.7 \times 10 = 527$$

$$52.7 \div 10 = 5.27$$

$$3.68 \times 100 = 368$$

$$3.68 \div 100 = 0.0368$$

5^2 = 5 × 5 = 25	4^3 = 4 × 4 × 4 = 64	$3^2 + 4^2$ = 9 + 16 = 25
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MULTIPLICATION

$$5219 \times 63 = 328797$$

$$\begin{array}{r} 5219 \\ \times 63 \\ \hline 15657 \\ 313140 \\ \hline 328797 \end{array}$$

x	5000	200	10	9
60	300000	12000	600	540
3	15000	600	30	27

Finally add all the numbers in red.

ROUNDING

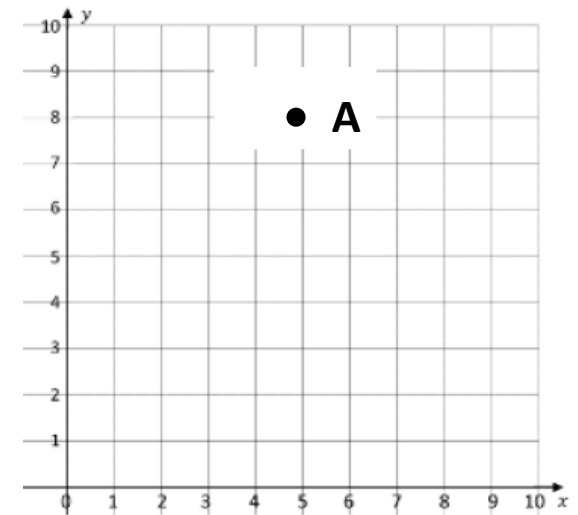
16.94

Nearest whole number = 17

16.94

One decimal place = 16.9

COORDINATES



(x,y)
↓ ↓

Point A has the coordinate (5,8)
 Along the corridor, up the stairs!

PROBABILITY

What is the probability of rolling a 4 on a fair dice?

$$\text{Answer} = \frac{1}{6}$$

1 because there is only one number four.
 6 because there are six numbers.

E1 & 2

DECIMALS

$$0.3 = \frac{3}{10}$$

$$0.75 = \frac{75}{100} = \frac{3}{4}$$

$$0.7 = \frac{7}{10}$$

$$0.02 = \frac{2}{100} = \frac{1}{50}$$

$$4.9 = 4\frac{9}{10}$$

$$2.11 = 2\frac{11}{100}$$