



Year 9 Mathematics

Exploring Numbers Practice Test 1

- Find the value of
 - $-10 + 8$
 - $-3 - 5$
 - $6 - 15$
- Find
 - $17 + (-12)$
 - $-13 - (-9)$
 - $-6 - (-15)$
- Find the value of
 - -6×-7
 - $8 \times (-12)$
 - $(-6) \times 3$
- Find the value of
 - $(-5)^2$
 - $(-2)^3$
 - $(-9)^2$
- Find the value of
 - $-24 \div 8$
 - $-45 \div (-3)$
 - $16 \div (-2)$
- Find the value of $9 \times (-8) + (5 - 12)$.
- Round each of the following to two decimal places
 - 256.1793
 - 0.04459
 - 4.8972
- Round each of these numbers to two significant figures
 - 2567
 - 23 067.453
 - 0.04059
- Choose the rational numbers in the following list.
$$\sqrt{9}, \sqrt{2}, 0.6, \pi, -\frac{3}{4}$$
- Write $3\frac{3}{8}$ as a decimal
- Write $\frac{5}{13}$ as a recurring decimal
- Write these decimals as fractions
 - 0.6
 - 0.24
 - 2.385

13 Simplify the ratio 38 : 24

14 Simplify these ratios

a) $0.2 : 0.14$

b) $2\frac{1}{2} : 1\frac{1}{3}$

15 Simplify the ratio of 560 metres to 2 kilometres

16 Divide \$300 in the ratio 2 : 3

17 Write these rates in simplest form

a) 120 km every 3 hours b) 5000 revolutions in $2\frac{1}{2}$ minutes

18 A family took 3 hours to complete the 210 km from their home to their holiday house.

a) Find their average speed for the trip.

b) If they increased their average speed to 90 km/h, how many hours and minutes would the trip have taken?

19 Which is better value? 5 kg of potatoes for \$3.80 or 3 kg for \$2.20

20 The amount of fertiliser needed is directly proportional to the area of land being covered. A company claims that one 8 kg bag of its product covers 10 m^2 . How many kilograms would be needed to cover 25 m^2 ?

Question 15 7 : 25

Question 16 \$120 and \$180

Question 17

a) 40 km/h

b) 2000 revolutions/minute

Question 18

a) 70 km/h

b) 2 hours 20 minutes

Question 19 The 3 kg bag is better value

Question 20 20 kg are needed for 25 m²