

## Year 6 Maths Homework

Due in Friday 23<sup>rd</sup> November 2018

**Ordering fractions** – place these fractions in order from smallest to largest. You will need to find a common denominator and convert all fractions so they have it.

e.g.  $\frac{2}{4}$   $\frac{1}{4}$   $\frac{1}{8}$  =  $\frac{4}{8}$   $\frac{2}{8}$   $\frac{1}{8}$  so the order is:  $\frac{1}{8}$   $\frac{1}{4}$   $\frac{2}{4}$

1.  $\frac{2}{3}$   $\frac{1}{6}$   $\frac{1}{3}$   $\frac{5}{6}$

2.  $\frac{3}{4}$   $\frac{1}{8}$   $\frac{1}{4}$   $\frac{5}{8}$

3.  $\frac{1}{5}$   $\frac{4}{15}$   $\frac{8}{10}$   $\frac{4}{5}$

4.  $\frac{5}{6}$   $\frac{1}{12}$   $\frac{12}{18}$   $\frac{1}{6}$

5.  $\frac{3}{7}$   $\frac{5}{21}$   $\frac{40}{42}$   $\frac{5}{14}$

**Fractions of a quantity** – solve these problems by dividing the quantity by the denominator and multiplying it by the numerator.

e.g.  $\frac{3}{8}$  of 48 =  $(48 \div 8) \times 3 = 18$

1.  $\frac{2}{5}$  of 55 =

2.  $\frac{5}{6}$  of 48 =

3.  $\frac{3}{7}$  of 77 =

4.  $\frac{5}{8}$  of 120 =

5.  $\frac{5}{9}$  of 207 =

**Percentages of a quantity** – solve these problems by multiplying the percentage by the quantity, and dividing the result by 100.

e.g.  $40\%$  of 20 =  $(40 \times 20) \div 100 = 8$

1.  $30\%$  of 50 =

2.  $60\%$  of 200 =

3.  $15\%$  of 65 =

4.  $85\%$  of 35 =

5.  $34\%$  of 122 =

**Percentage increases and decreases** – solve these problems by finding the percentage of the quantity as above, and then adding it to, or subtracting it from, the quantity.

e.g. Increase 45 by 60%: 60% of 45 is 27,  $45 + 27 = 72$ .

1. Increase 30 by 20%

2. Decrease 70 by 60%

3. Increase 75 by 35%

4. Decrease 15 by 85%

5. Increase 4.7 by 12%