S1 December Assessment Revision

<u>Previous Revision</u>

1. Find the duration between the following times:

    a. 7.13am until 4.52am   b. 8.41pm until 11.57pm

    b. 0904hrs until 1921hrs   d. 0625hrs until 1921hrs

2. Find the following:

    a. 7 – 9   b. -20 + 4   c. 13 + (-12)

    d. -19 + (-2)   e. 6 – 8 + 12   d. 7 + (-10) - 8

3. Round the following numbers to the nearest 10:

    a. 487   b. 389   c. 6729

4. If p = 3, q = 8 and r = 4, evaluate the following:

    a. $q – 2p + 5r$ b. $(pr)^2 – 4r$

    c. $(r – p)^2 – 2q$ d. $pr^2 – pqr$

5. Simplify the following expressions:

    a. $6e – 5r + 3 – 2r + 9e – 5$ b. $10 – 7y + 4p – 3y – 9p + 1$

    c. $3r^2 – 5r + 7 – 2r^2 – 7r + 1$ d. $19w^3 – 3w^2 + w – 17w^2 + 4w^3 – 5w$

6. If e = 2, f = 4 and g = 5, evaluate the following:

    a. $f – 2e$ b. $ef – g$ c. $eg^2 – fg$

7. Solve the following equations:

    a. $e – 15 = 30$ b. $p + 8 = 7$

8. Round the following numbers to the nearest hundred:

    a. 846   b. 6387   c. 12,693

9. Evaluate the following:

    a. 17 – 2 x 5   b. 9 x 4 + 3 x 6   c. 24 – 7 x 6

Fractions and Percentages

1. Simplify the following:

    a. $\dfrac{4}{12}$ b. $\dfrac{25}{35}$ c. $\dfrac{90}{120}$

2. Convert the following into improper fractions:

    a. $3\dfrac{1}{5}$ b. $6\dfrac{7}{8}$ c. $4\dfrac{7}{9}$

3. Write the following as mixed numbers:

    a. $\dfrac{24}{5}$ b. $\dfrac{37}{4}$ c. $\dfrac{41}{6}$

4. Find the following:

    a. $\dfrac{5}{7}$ of £6279   b. $\dfrac{8}{9}$ of £6786

    c. $\dfrac{4}{5}$ of £4285   d. $\dfrac{3}{8}$ of £2136

5. William raises a total of £4208 for a charity expedition. If he spends $\dfrac{3}{8}$ of the money on buying supplies for a local community centre, how much will he be left with?

6. Write the following as fractions in their simplest form:

    a. 10%   b. 35%   c. 64%   d. 78%

7. Find the following:

      a. 25% of £416   b. 75% of £340   c. 20% of £760

8. Find the following:

      a. 75% of £3136   b. 25% of £568   c. 30% of £260

      d. 15% of £680   e. 12.5% of £440   f. 22.5% of £620

9. Write the following fraction as s percentage:
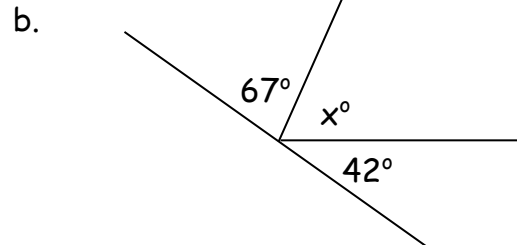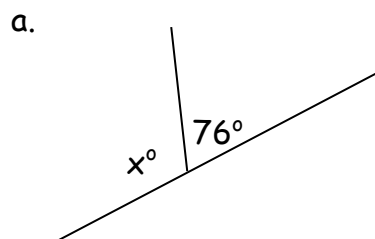
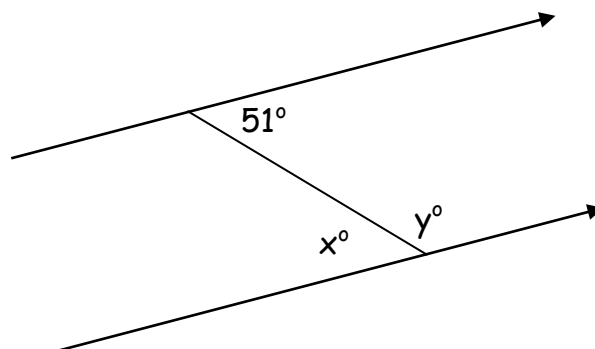   a. $\dfrac{1}{4}$ b. $\dfrac{2}{5}$ c. $\dfrac{24}{160}$

Angles

1. How many degrees are there in a straight line?

2. For angles to be complementary, what should they add up to?

3. Calculate the value of angles $x°$ in the following diagrams:

   a.   b.

4. Find angle $x°$ and $y°$ in the diagram below:

<u>Decimals</u>

1. Find the following:

      a. 3.87 x 1000   b. 3856.87 x 10

      c. 485.28 x 10000   d. 0.078 x 1000

2. Calculate:

      a. 6.5 x 4   b. 12.84 x 7   c. 287.47 x 9

3. Find the following:

      a. 4.98 + 12.47   b. 19.8 – 12.5

4. Round the following numbers to 1 decimal place:

      a. 28.4628   b. 377.38456   c. 99.9999999

5. Find the following:

      a. 8.3 + 5.12 + 42.908   b. 271 – 56.37 + 7.041

6. Round the following to 2 decimal places:

      a. 47.287   b. 387.071   c. 58.0598

7. Calculate:

      a. 32.7 + 3.32 x 8   b. 247.82 – 14.38 x 5