



Year 8 Maths Homework Sheet No.15

To be completed on loose-leaf paper.



Aims:

- To provide ongoing revision of skills and concepts
- To develop procedural knowledge and fluency.

Need help? →

1. Solve the following equations.

(a) $m + \frac{1}{4} = \frac{3}{4}$

b. $\frac{l}{6} = -3.8$

c. $2x + 4 = 5$

d. $-4(y + 10) = 12$

2. Solve the following equations

a. $3d + 4 = -11 - 2d$

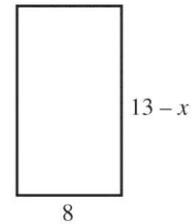
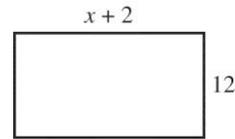
b. $18 - 4e = e + 3$

3. These two rectangles have the same area.

(a) Write an equation to show the areas are the same.

(b) solve the equation in part (a) to find x.

(c) Find the area of each rectangle? (All lengths are in metres.)



4. Three consecutive even numbers add up to 66.

(a) Write an equation to represent the situation

(b) Find the numbers

5. For each of the following statements, write down an equation and then solve.

- a number is tripled and the result is thirty nine**
- four times a certain number when added to three is equal to thirty five**
- I add a number to seven and then triple the result to get an answer of thirty six**
- a number that has been tripled and added to four and then divided by five equals five.**
- twice a certain number is subtracted from three and the result is minus seven.**

ANSWERS: You must show the mathematics used to get these answers. Simply writing the answer is not enough.

- (a) $m = \frac{1}{2}$ b. $L = 22.8$ c. $X = \frac{1}{2}$ d. $Y = -13$
- a. $d = -3$ b. $e = 3$
- (a) $12(x+2) = 8(13-x)$ b. $x = 4$ c. Area = 72 square metres
- (a) $2x + (2x+2) + (2x+4) = 66$ (b) Numbers are 20, 22 and 24
- a. $x = 13$ b. $x = 8$ c. $x = 5$ d. $x = 7$ e. $x = 5$