

Homework 22

Hand in: _____

Do not use a calculator for questions 1-10. You must show all of your working out. You may need to look up definitions or ask for some extra help either at home or at school for some of these questions.

<p>1. Simplify the expression,</p> $3ab + 4b - ab + 3b$	<p>2. Expand the bracket</p> $2a(a + 5)$
<p>3. Find the value of the expression when $a = 4$ and $b = 9$</p> $4ab + 10$	<p>4. Write a set of 5 numbers which have a mean of 12</p> <p>____, _____, _____, _____, _____</p>

5. If $\frac{5}{8}$ of an amount is 35.
What is the amount?

6. Equivalent FDP. Fill in the missing values.

Fraction	Decimal	Percentage
		130%

7. Find 12.5 % of 72

8. Share £140 in the ratio
4 : 3.

9. A jeweller uses 20g of silver to make a bracelet.
How much silver does she need to make 12 bracelets?

10. Work out the value of;

$$2 + 3 \times 4^2$$

Gold:

Given that you know $-5 \times -5 = 25$,
Work out the answers to the following:

4^2	$(-3)^2$	$-8 \times -8 =$
2^3	$(-2)^3$	$-1 \times -1 \times -1 =$
$(-5)^3$	$(-10)^2$	$-2 \times -3 \times -5$

There are two solutions to $\sqrt{144}$, what are they?

Silver:

Answer the questions below and use these to complete the sentences.

$$3 \times 3 = 9$$

$$2 \times 3 = 6$$

$$1 \times 3 = 3$$

$$0 \times 3 =$$

$$-1 \times 3 =$$

$$-2 \times 3 =$$

$$-3 \times 3 =$$

$$3 \times -3 =$$

$$2 \times -3 =$$

$$1 \times -3 =$$

$$0 \times -3 = 0$$

$$-1 \times -3 =$$

$$-2 \times -3 =$$

$$-3 \times -3 =$$

When we multiply a negative number and a positive number together the answer is _____.

When we multiply two negative numbers together the answer is _____.

Complete the fact families below:

$5 \times -4 = -20$	$-8 \times -4 = \underline{\quad}$
$-4 \times 5 = \underline{\quad}$	$\underline{\quad} \times \underline{\quad} = \underline{\quad}$
$-20 \div 5 = \underline{\quad}$	$\underline{\quad} \div \underline{\quad} = \underline{\quad}$
$-20 \div -4 = \underline{\quad}$	$\underline{\quad} \div \underline{\quad} = \underline{\quad}$

Bronze:

Match the worded question to the calculation and work out the answer:

Alice has £250 in her bank account. She pays £271 to have her car repaired. How much overdrawn is she?	$-271 - - 250 =$
Beth is £271 overdrawn, she pays £250 into her bank account. What is her balance?	$-271 + - 250 =$
Charlie owes a debt of £271. His sister offers to take £250 of this debt from him	$-271 + 250 =$
Danny is overdrawn by £271, and increases this debt by £250. How much money does he now owe?	$250 - 271 =$

