Year 6 Maths Mastery

Express Missing Number Problems Algebraically

twinkl

Emergency Plumber

1) An emergency plumber charges £15 for a call out and £8 per hour for any work. Which formula below can be used to calculate how much the plumber charges?

| 15h + 8 | 8h - 15 | 8h + 15 | 15h - 8 |

(h is the number of hours the plumber works)

If you finish:

💡 Write some similar problems for your partner.

Hide Answers

p and q

2a) Write two algebraic expressions to show the relationship between p and q if p is 4 more than q.

$$p - 4 = q$$

$$p = q + 4$$

2b) Write two algebraic expressions to show the relationship between p and q if p is 12 less than q.

$$p + 12 = q$$

$$p = q - 12$$

2c) Write two algebraic expressions to show the relationship between p and q if p is 12 less than q.

$$p = 2q$$

$$p = q \div 2$$

If you finish:

💡 Challenge a partner to write equations to express the relationship between p and q.

Hide Answers

a and b

3a) Which expressions are a simplification of: $a + a + a + b + b$?

3a + 2b	2a + 3b	2b + 3a	2b – 3a

3b) Which expressions are a simplification of: $a + a + a + a - b$?

4a + b	b + 4a	4a - b	b - 4a

3c) Write an expression which simplifies: $a - b + a - b - b$.

2a – 3b

If you finish:

💡 Explain your answers to a partner.

💡 Write some of your own problems for a partner.

Hide Answers

Discount

4) A farmer sells barrels of milk for £14. A discount of £6 on any order is given for paying in advance. Write the formula that could be used to calculate the cost of any number of barrels (b) of milk paid for in advance.

14b - 6

If you finish:
💡 Explain your answer to a partner.
💡 Think about how you could improve your answer.

Hide Answers