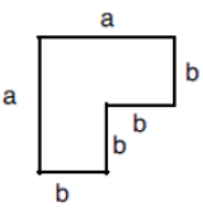
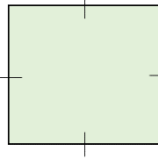
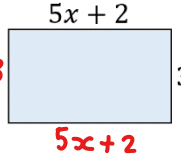


<p>1) Simplify</p> <p>a) $a + 2a + 7a$ $10a$</p> <p>b) $3xy + 7yx$ $10xy$</p> <p>c) $2a - 7a + a$ $-4a$</p> <p>d) $x^2 + 3x^2$ $4x^2$</p>	<p>2) Simplify</p> <p>a) $4a + 5b + 2a + 7b$ $6a + 12b$</p> <p>b) $6x - 7y - 2x + 3y$ $4x - 4y$</p> <p>c) $7x^2 - 5x - 6x + 3 + x^2$ $8x^2 - 11x + 3$</p>	<p>3) $a = 4, b = 7, c = -2$ Find the value of:</p> <p>a) $3a$ 12</p> <p>b) $b + c$ 5</p> <p>c) $5a + 2b$ 34</p>	<p>4) Solve</p> <p>a) $x + 2 = 8$ $x = 6$</p> <p>b) $3a = 18$ $a = 6$</p>
<p>5) Simplify</p> <p>a) $2x \times 4$ $8x$</p> <p>b) $a \times a \times a \times a$ a^4</p> <p>c) $4b \times 3b$ $12b^2$</p> <p>d) $5xy \times 6xy$ $30x^2y^2$</p>	<p>6) $x = 3$ and $y = 7$ Find the value of</p> <p>a) x^2 9</p> <p>b) $2y^2$ 98</p> <p>c) $\frac{x^2+y}{4}$ 4</p>	<p>7) Solve</p> <p>a) $2c + 3 = 13$ $c = 5$</p> <p>b) $4 + 5y = 11$ $y = \frac{7}{5}$</p>	<p>8) Solve</p> <p>a) $x + x + x + x = 17$ $x = \frac{17}{4}$</p> <p>b) $\frac{1}{2}x = 10$ $x = 20$</p>
<p>9) Simplify</p> <p>a) $10x \div 2$ $5x$</p> <p>b) $15x \div 3x$ 5</p> <p>c) $\frac{x+x+x}{3}$ x</p> <p>d) $3mn \div n$ $3m$</p>	<p>10) Solve</p> <p>a) $\frac{x}{4} = 2.5$ $x = 10$</p> <p>b) $\frac{x}{2} - 3 = 7$ $x = 20$</p>	<p>11) Find the mistake:</p> <p>They should have +2 first then $\div 5$</p> $\begin{array}{r} 5x - 2 = 10 \\ +5 \quad \quad \div 5 \\ \hline x - 2 = 2 \\ +2 \quad \quad +2 \\ \hline x = 4 \end{array}$ <p>b) Explain why this is wrong. Multiplication comes before subtraction so when you do the operations in reverse you add then divide</p>	<p>12) Elizabeth is x years old. Write an expression for each person's age:</p> <p>a) Alex is 3 years older than Elizabeth. $x + 3$</p> <p>b) Miles is 2 years younger than Elizabeth. $x - 2$</p> <p>c) Leah is double Elizabeth's age. $2x$</p> <p>d) Now find an expression for the total of their ages. $5x + 1$</p>
<p>13) Write down two equations that would have a solution of $x = 4$</p> <p>$2x = 8$</p> <p>$x + 2 = 6$</p>	<p>14) Write down an expression for the perimeter</p>  <p>$2a + 4b$</p>	<p>15) Find an expression for the perimeter</p> <p>$12x - 4$</p> 	<p>16) The perimeter of this shape is 50cm. Find the value of x.</p>  <p>$10x + 10 = 50$ $10x = 40$ $x = 4$</p>