Multiple choice questions - Formulae and rearranging

Year: Year 8 · 10

Question 1 Find $3a + 2$ when $a = 4$.

- **A.** 14
- **B.** 18
- **C.** 12
- **D.** 20

Question 2 Find $x^2 - 3$ when $x = -2$.

- **A.** -7
- **B.** 1
- **C.** -1
- **D.** 7

Question 3 Make x the subject of $y = x - 4$.

- **A.** $x = y - 4$
- **B.** $x = 4 - y$
- **C.** $x = y + 4$
- **D.** $x = \frac{y}{4}$

Question 4 Make x the subject of $y = 5x$.

- **A.** $x = 5y$
- **B.** $x = y - 5$
- **C.** $x = \frac{5}{y}$
- **D.** $x = \frac{y}{5}$

Question 5 Make x the subject of $y = 3x - 1$.

- **A.** $x = \frac{y+1}{3}$
- **B.** $x = 3y + 1$
- **C.** $x = \frac{y-1}{3}$
- **D.** $x = \frac{y}{3} + 1$

Question 6 Which of these is a formula?

- **A.** $2x + 3$
- **B.** $x + 4 = 9$

- ◯ **C.** $V = lwh$
- ◯ **D.** $x > 2$

Question 7 $2(x + 3) = 2x + 6$ is an example of a(n)

- ◯ **A.** equation
- ◯ **B.** identity
- ◯ **C.** inequality
- ◯ **D.** expression

Question 8 If $P = 2l + 2w$, then $l =$

- ◯ **A.** $\frac{P-2w}{2}$
- ◯ **B.** $P - 2w$
- ◯ **C.** $\frac{P}{2} - w$ only
- ◯ **D.** $\frac{P+2w}{2}$

Question 9 Find $5 - 2n$ when $n = -3$.

- ◯ **A.** -1
- ◯ **B.** 1
- ◯ **C.** 11
- ◯ **D.** -11

Question 10 Make t the subject of $d = st$.

- ◯ **A.** $t = ds$
- ◯ **B.** $t = \frac{d}{s}$
- ◯ **C.** $t = d - s$
- ◯ **D.** $t = \frac{s}{d}$

Answer grid - Formulae and rearranging

Year: Year 8

Question	Answer	Explanation
1	**A**	$12 + 2 = 14$.
2	**B**	$(-2)^2 = 4$, $4 - 3 = 1$.
3	**C**	Add 4 to both sides.
4	**D**	Divide by 5.
5	**A**	Add 1 then divide by 3.
6	**C**	A formula links several quantities.
7	**B**	It is true for all values of x.
8	**A**	$P - 2w = 2l$, then divide by 2.
9	**C**	$5 - 2(-3) = 5 + 6 = 11$.
10	**B**	Divide both sides by s.