

Name: _____

Exam Style Questions

Multiplying Terms



Corbettmaths

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser

You may use tracing paper if needed

Guidance

1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

Revision for this topic

www.corbettmaths.com/contents

Video 18



1. Simplify

(a) $8 \times y \times 2$

$$\frac{16y}{\dots\dots\dots}$$

(1)

(b) $a \times a \times a$

$$\frac{a^3}{\dots\dots\dots}$$

(1)

(c) $3 \times a \times c$

$$\frac{3ac}{\dots\dots\dots}$$

(1)

(d) $w \times 5 \times e$

$$\frac{5ew}{\dots\dots\dots}$$

(1)

(e) $2y \times y$

$$\frac{2y^2}{\dots\dots\dots}$$

(1)

(f) $3a \times 4c$

$$\frac{12ac}{\dots\dots\dots}$$

(1)

(g) $5w \times 6w$

$$\frac{30w^2}{\dots\dots\dots}$$

(1)

(h) $2m^2 \times 4m$

$$\frac{8m^3}{\dots\dots\dots}$$

(1)

2. Which of the following expressions is not equal to the others?

$4a \times 2y$

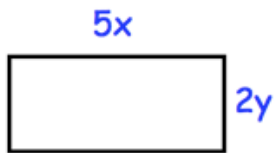
$8a \times y$

$2ay \times 4a$

$a \times 8y$

.....
(2)

3. A rectangle has length $5x$ and width $2y$.



Find an expression for the area of the rectangle.

$10xy$

.....
(2)

4. Simplify $y \times y \times y$

$$\underline{y^3}$$

(1)

5. Simplify $5 \times m \times p$

$$\underline{5mp}$$

(1)

6. Simplify $w^5 \times w^3$

$$\underline{w^8}$$

(1)

7. Simplify

$$y^8 \times y^{-2}$$

$$\underline{y^6}$$

(1)

8. Simplify $5a \times 3a \times 2a$

$$\underline{30a^3}$$

(2)

9. Simplify $p \times s \times 5$

$$\underline{5ps}$$

(1)

10. Simplify

(a) $m^2 \times m^2$

$$\frac{m^4}{\dots\dots\dots}$$

(1)

(b) $w^5 \times w^3$

$$\frac{w^8}{\dots\dots\dots}$$

(1)

(c) $8k^3 \times 2k^2 \times k$

$$\frac{16k^6}{\dots\dots\dots}$$

(1)

(d) $-5y^2 \times 5y$

$$\frac{-25y^3}{\dots\dots\dots}$$

(1)

(e) $4am \times m$

$$\frac{4am^2}{\dots\dots\dots}$$

(1)

(f) $-2 \times -4ay \times -2a$

$$\frac{-16a^2y}{\dots\dots\dots}$$

(1)

(g) $6ay \times 3ay$

$$\frac{18a^2y^2}{\dots\dots\dots}$$

(1)

11. A rectangle and square have the same area.
The rectangle has length $12x$ and width $3x$.

Find the length of each side of the square.

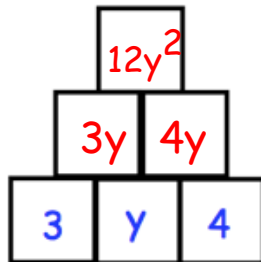
rectangle: area = $36x^2$

square: $6x \times 6x = 36x^2$

$6x$

.....
(3)

- 12.



To find the contents of each empty box, multiply the two terms directly beneath it.

Complete the multiplication pyramid.

(3)

13. Simplify

$$8a^{-3}c^4 \times 2a^4c$$

$$16ac^5$$

.....
(2)

14. The rule for a sequence is that each term is found by multiplying the two]
previous terms.

The first two terms are $2x$ and $3y$.

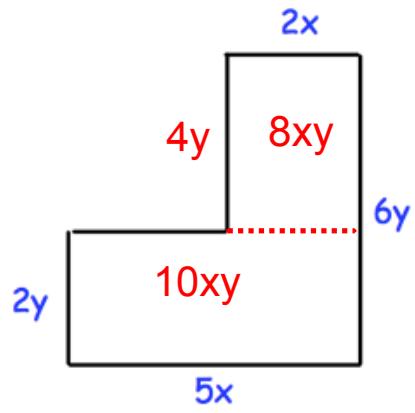
$$2x \quad 3y \quad \underline{\quad} \quad \underline{\quad} \quad \underline{\quad} \quad \dots \quad \dots$$

Find the next three terms.

$$\underline{6xy} \quad \underline{18xy^2} \quad \underline{108x^2y^3}$$

.....
(3)

15.



Write down an expression for the area of the shape.

$18xy$

.....
(3)