

6 SEP 2018

### Starter No Calculator

State all number sets to which each of the following belong:

1.  $3.1414141414\dots$   $\mathbb{R}, \mathbb{Q}$
2.  $-7\frac{5}{11}$   $\mathbb{R}, \mathbb{Q}$
3.  $0$   $\mathbb{R}, \mathbb{Q}, \mathbb{W}, \mathbb{Z}$
4.  $-2$   $\mathbb{R}, \mathbb{Q}, \mathbb{Z}$
5.  $\sqrt{2}$   $\mathbb{R}, \mathbb{I}$
6.  $-\sqrt{4}$   $\mathbb{R}, \mathbb{Q}, \mathbb{N}, \mathbb{W}, \mathbb{Z}$

### Combining Like Terms

Determine which terms are alike.

$3x$ ,  $\sqrt{2}x^3$ ,  $-5x^2$ ,  $\frac{1}{6}x$ ,  $7x^2$ ,  $8$

variables same letters & same exponents

### Combining Like Terms

Simplify each expression by combining like terms.

$3x + 7x^2 - 3y + 7 + 4x - 2y + 5$

$7x + 7x^2 - 5y + 12$

$7x^2 + 7x - 5y + 12$

### Combining Like Terms

Simplify each expression by combining like terms.

$(n + m + 2) + (3n + 2m) + (m - 2)$

$n + m + 2 + 3n + 2m + m - 2$

$4n + 4m$

$4m + 4n$

### Combining Like Terms

Simplify each expression by combining like terms.

$$x^3 + 2x^2y + 2y^2 - 3x^2y - 3x^3$$

$$-2x^3 - 1x^2y + 2y^2$$

$$-2x^3 + 2y^2 - 1x^2y$$

JustMaths

Q1. Simplify  $4x + 3y - 2x + 5y$

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Q2. Simplify  $2xy^2 + 3y^2 - 13xy^2 + 4x - 17y^2$

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Q3. Simplify  $5a + 4b - 2a + 3b$

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Q4. Simplify  $8v + 7w - 2v$

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Q5. Simplify  $6w + 2x - 6w + 3x$

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Q6. Simplify  $6a + 7b - 2a + b^2$

Q7. Simplify  $2x + 7x$

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Q8. Simplify  $4x + 9y^2 - 13xy - x - 2y^2$

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Q9. Simplify  $4c - 5d + 3c + 2d$

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Q10. Simplify  $a + a + a + a$

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Q11. Simplify  $3a^2 + 5a - a^2 + 2a$

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Q12. Simplify  $2ab - 7b - 5ab - 6b$