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## SAMPLE ASSESSMENT TEST

1. Find the result for the following equation:

—  $5 + 15 \times 2 - 3 \times 2 =$

Select one:

- a. 74
- b. 34
- c. 29
- d. 59
- e. None of the above.

2. Write as a fraction in the simplest form:

—  $3 \frac{1}{4} \div 16$

Select one:

- a.  $\frac{13}{4}$
- b.  $3 \frac{1}{4}$
- c.  $\frac{13}{64}$
- d. 52
- e. None of the above.

3. Express as a percentage:

—  $5 \frac{1}{2}$

Select one:

- a. 5.5%
- b. 55%
- c. 0.55%
- d. 500%
- e. None of the above.

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## 4. Express as a percentage: 0.025

Select one:

- a. 0.25%
- b. 2.5%
- c. 25%
- d. 250%
- e. None of the above.

## 5. Express as a fraction: 285%

Select one:

- a.  $\frac{57}{20}$
- b.  $\frac{28.5}{10}$
- c.  $\frac{285}{100}$
- d.  $\frac{28}{10}$
- e. None of the above.

## 6. Express as a fraction: 0.2

Select one:

- a.  $\frac{1}{50}$
- b.  $\frac{1}{500}$
- c.  $\frac{2}{100}$
- d.  $\frac{2}{5}$
- e. None of the above.

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**7. Express as a fraction: 0.75**

—  $5 + 15 \times 2 - 3 \times 2 =$

Select one:

- a.  $\frac{1}{4}$
- b.  $\frac{1}{4}$
- c.  $\frac{3}{4}$
- d.  $7\frac{5}{10}$
- e. None of the above.

**8. Write as a fraction: 20%**

Select one:

- a. 0.2
- b. 0.5
- c.  $\frac{1}{4}$
- d.  $\frac{1}{5}$
- e. None of the above.

**9. 15% of 60 =**

Select one:

- a. 15
- b. 6
- c. 8
- d. 20
- e. None of the above.

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10. If  $x = 2$  and  $y = -1$ , calculate  $x^2 - 3y^2$

Select one:

- a. 1
- b. 7
- c. -1
- d. -3
- e. None of the above.

11. Evaluate  $(-3)^6$

Select one:

- a. 18
- b. 81
- c. -729
- d. 729
- e. None of the above.

12. Evaluate:

—  $\frac{5}{8} \div \frac{-3}{16}$

Select one:

- a.  $\frac{15}{128}$
- b.  $-\frac{15}{128}$
- c.  $\frac{100}{3}$
- d.  $-3 \frac{1}{3}$
- e. None of the above.

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## 13. Evaluate:

—  $(\frac{1}{9})^4$

Select one:

- a.  $\frac{1}{81}$
- b.  $-\frac{1}{81}$
- c.  $-\frac{1}{6561}$
- d.  $\frac{1}{27}$
- e. None of the above.

## 14. Simplify:

—  $(xy^4 \div 3y^3)$

Select one:

- a.  $\frac{xy}{3y}$
- b.  $\frac{-xy}{3}$
- c.  $\frac{x}{3y}$
- d.  $\frac{xy}{3}$
- e. None of the above.

## 15. Simplify: $(-6)^{13} \div (-6)^{12}$

Select one:

- a. 6
- b. 1
- c. 12
- d. -12
- e. None of the above.

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**16. Write as a single power and express each answer with positive exponents:  $(-3^4)^6$**

Select one:

- a.  $3^{10}$
- b.  $12^6$
- c.  $-3^{20}$
- d.  $3^{20}$
- e. None of the above.

**17. Write as a single power and express each answer with positive exponents:  $(2f^{-5})^{-8}$**

Select one:

- a.  $f^{-13}/16$
- b.  $f^{13}/16$
- c.  $f^{40}/16$
- d.  $f^{-13}/64$
- e. None of the above.

**18. Simplify:  $(x^2 + xy - y^2) - (8y^2 - 3xy - x^2)$**

Select one:

- a.  $-7x^2 + 4xy$
- b.  $4xy - 9y^2$
- c.  $2x^2 + 4xy - 9y^2$
- d.  $-2xy - 7x^2 - 9y^2$
- e. None of the above.

**19. Expand and simplify:  $(x + 2)(x - 3)$**

Select one:

- a.  $x^2 - x + 6$
- b.  $x^2 - 5x - 6$
- c.  $x^2 - 2x + 6$
- d.  $2x^2 - x + 6$
- e. None of the above.

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**20. Expand and simplify:  $(-3x + 1)^2$**

Select one:

- a.  $9x^2 + 1$
- b.  $9x^2 - 1$
- c.  $9x^2 + 6x + 1$
- d.  $9x^2 - 6x + 1$
- e. None of the above.

**21. Divide and simplify:  $(2x^3y^2 - 5xy + x^2y) / xy$**

Select one:

- a.  $2x^2y^2 - 5 + xy$
- b.  $2x^2y^2 - 5xy + x^2y$
- c.  $2x^3y - 5xy + x$
- d.  $2x^2y - 5 + x$
- e. None of the above.

**22. Factor  $2d^2 + 22d + 56$**

Select one:

- a.  $(2d + 14)(d + 4)$
- b.  $(d + 7)(2d + 8)$
- c.  $2(d + 7)(d - 4)$
- d.  $2(d + 7)(d + 4)$
- e. None of the above.

**23. Solve for g, where  $g^2 - 5g - 14 = 0$**

Select one:

- a. 2, 7
- b. -2, 7
- c. 2, -7
- d. -2, -7
- e. None of the above.

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**24. Solve for p, where  $1 - 16p^2 = 0$**

Select one:

- a.  $\frac{1}{4}$
- b.  $-\frac{1}{4}$
- c.  $\frac{1}{16}$
- d.  $\frac{1}{4}$  and  $-\frac{1}{4}$
- e. None of the above.

**25. Solve  $-(2f)^0$**

Select one:

- a. 0
- b. -0
- c. 1
- d. -1
- e. None of the above.

**26. How many solutions of x are there for solving the equation  $x = 8x^3$**

Select one:

- a. 1
- b. 2
- c. 3
- d. 0
- e. None of the above.

**27. Solve for x, where  $x^2 - x - 7 = 0$**

Select one:

- a. 1, 7
- b. -1, 7
- c. -1, -7
- d. 1, -7
- e. None of the above.

## **ASSESSMENT TEST – ANSWER KEY**

<b>Q1</b>	<b>C</b>
<b>Q2</b>	<b>C</b>
<b>Q3</b>	<b>E</b>
<b>Q4</b>	<b>B</b>
<b>Q5</b>	<b>A</b>
<b>Q6</b>	<b>E</b>
<b>Q7</b>	<b>C</b>
<b>Q8</b>	<b>D</b>
<b>Q9</b>	<b>E</b>
<b>Q10</b>	<b>A</b>
<b>Q11</b>	<b>D</b>
<b>Q12</b>	<b>D</b>
<b>Q13</b>	<b>E</b>
<b>Q14</b>	<b>B</b>
<b>Q15</b>	<b>E</b>
<b>Q16</b>	<b>E</b>
<b>Q17</b>	<b>E</b>
<b>Q18</b>	<b>C</b>
<b>Q19</b>	<b>E</b>
<b>Q20</b>	<b>D</b>
<b>Q21</b>	<b>D</b>
<b>Q22</b>	<b>D</b>
<b>Q23</b>	<b>B</b>
<b>Q24</b>	<b>D</b>
<b>Q25</b>	<b>D</b>
<b>Q26</b>	<b>E</b>
<b>Q27</b>	<b>E</b>