

Special Products - Difference of Cubes 1

Name _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Factor.

1) $x^3 - 8$ 1) _____
A) $(x + 2)(x^2 - 2x + 4)$ B) $(x - 2)^3$
C) Prime D) $(x - 2)(x^2 + 2x + 4)$

2) $y^3 - 125$ 2) _____
A) $(y - 5)(y^2 + 5y + 25)$ B) $(y - 5)(y^2 - 25)$
C) $(y + 5)(y^2 - 5y - 25)$ D) $(y - 5)(y^2 + 5y - 25)$

3) $1000p^3 - 1$ 3) _____
A) $(10p - 1)(100p^2 + 1)$ B) $(10p - 1)^3$
C) $(10p - 1)(100p^2 + 10p + 1)$ D) Prime

4) $27r^3 - 8$ 4) _____
A) $(3r - 2)(9r^2 - 6r - 4)$ B) $(3r - 2)(9r^2 - 4)$
C) $(3r + 2)(9r^2 + 6r + 4)$ D) $(3r - 2)(9r^2 + 6r + 4)$

5) $343y^3 - 729$ 5) _____
A) $(7y - 9)(49y^2 + 81)$ B) $(7y - 9)^3$
C) Prime D) $(7y - 9)(49y^2 + 63y + 81)$

6) $512y^3 - 343$ 6) _____
A) $(8y - 7)(64y^2 + 56y + 49)$ B) $(8y + 7)(64y^2 - 56y + 49)$
C) $(512y - 7)(y^2 + 56y + 49)$ D) $(8y - 7)(64y^2 + 49)$

Answer Key

Testname: 6.18.28 SOLVINGQUADRATICSI

- 1) D
- 2) A
- 3) C
- 4) D
- 5) D
- 6) A