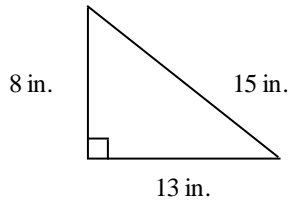


HCHS NTI Day #10 - MATH

Find the area of the figure. $A = \frac{1}{2}bh$

___ 1.

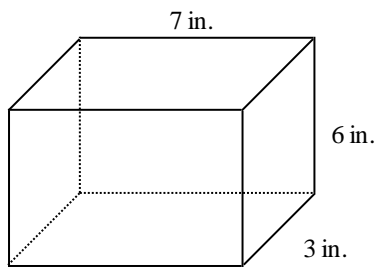


Drawing not to scale

- a. 52 in.² b. 390 in.² c. 36 in.² d. 104 in.²

Find the volume of the solid. Round to the nearest tenth if necessary. Use 3.14 for π .

___ 2.



$$V = lwh$$

Drawing not to scale

- a. 63 in.³ b. 126 in.³ c. 252 in.³ d. 54 in.³

What is the solution of the equation?

___ 3. $g - 4 = 2$

- a. 1 c. 8
b. 6 d. -2

What is the solution of the equation?

___ 4. $5(y + 7) = 65$

- a. 6 b. 20 c. 5 d. -20

What is the simplified form of each expression?

___ 5. $(-2)^2$

- a. -9 b. $\frac{1}{4}$ c. 4 d. 4

- ___ 6. -3^2
a. 6 b. -9 c. 9 d. -6

What is the simplified form of each expression?

- ___ 7. $x^9 \cdot 2y^3 \cdot 6x^3$
a. $12xy^{15}$ b. $12x^{27}y^3$ c. $9x^{12}y^3$ d. $12x^{12}y^3$

What is the simplified form of the expression?

- ___ 8. $(k^7)^2$
a. $2k^{14}$ b. k^9 c. k^{14} d. k^{49}

What is the simplified form of each expression?

- ___ 9. $(-h^4)^3$
a. $-h^7$ b. h^1 c. h^{12} d. $-h^{12}$

Simplify the expression.

- ___ 10. $6 + (-10)$
a. -16 b. 16 c. 4 d. -4
- ___ 11. $1 - (-5)$
a. -4 b. 4 c. 6 d. -6
- ___ 12. $7 \cdot (-6)$
a. 1 b. 42 c. -1 d. -42
- ___ 13. $-32 \div 8$
a. 4 b. -4 c. -24 d. 24
- ___ 14. $2^3 + 5(-5 + 2) - 3$
a. -16 b. 26 c. -18 d. -10

Simplify. Write the answer in standard form.

- ___ 15. $(7z^2 - 2z - 8) - (3z^2 + 3z - 2)$
a. $10z^2 + 5z + 6$ c. $4z^2 + 5z - 6$
b. $4z^2 - 5z - 6$ d. $10z^2 - 5z + 10$
- ___ 16. $(y - 4)(y - 7)$
a. $y^2 + 11y - 28$ c. $y^2 + 11y + 28$
b. $y^2 - 11y - 28$ d. $y^2 - 11y + 28$
- ___ 17. $(x + 5)^2$
a. $x^2 + 25$ c. $x^2 + 10x + 25$

b. $x^2 + 5x + 25$

d. $x^2 + 10x + 10$

Evaluate the expression for the given value of the variable(s).

____ 18. $5a - 5b$; $a = -2$, $b = -1$

a. -15

b. 15

c. 5

d. -5

____ 19. $\frac{3(2h + 3)}{6 + h}$; $h = -3$

a. -5

b. 0

c. $-\frac{1}{2}$

d. -3

____ 20. $-x^2 + 5x - 3$; $x = 3$

a. -7

b. 3

c. 6

d. 9

Combine like terms. What is a simpler form of each expression?

____ 21. $-(y - 2) - y$

a. $2y - 2$

b. $-2y + 2$

c. $2y + 2$

d. y

PLEASE CONTINUE ON TO THE NEXT PAGE. MAKE SURE YOU ANSWER ALL SIX QUESTIONS.

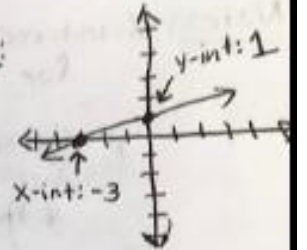
Skill Drill - Intercepts

● Skill #1: Intercepts on a graph.

Notes: x-intercept: The point where a graph crosses the x-axis.

y-intercept: The point where a graph crosses the y-axis.

Example:



Practice: Find the x and y intercepts of each graph.

