

DO NOT DO CIRCLED PROBLEMS - They are in your notes!

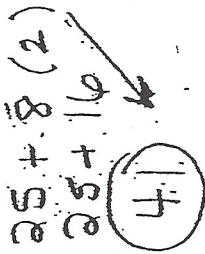
Applications : Connections : Extensions

As you work on these ACE questions, use your calculator whenever you need it.

Applications Show all work!

In 1-5, evaluate the expression for the given x value, and describe the order in which you performed the operations.

1. $3x + 15$ when $x = 12$
2. $25 + 8x$ when $x = 2$
3. $10x - 12$ when $x = 4$
4. $-3x + 10$ when $x = 7$
5. $40 - 5x$ when $x = 6$



In 6-9, evaluate the expression for the given x value, and describe the order in which you performed the operations.

6. $5x^2$ when $x = 4$
7. $3x^2$ when $x = -3$
8. $-3x^2$ when $x = 4$
9. $-3x^2$ when $x = -4$

In 10-17, evaluate the expression for the given x value, and describe the order in which you performed the operations.

10. $4x^2 + 3x$ when $x = 7$
11. $4x^2 + 3x$ when $x = -7$
12. $4x^2 - 3x$ when $x = 7$

13. $4x^2 - 3x$ when $x = -7$
14. $4x^2 + 3x + 5$ when $x = 2$
15. $4x^2 + 3x - 5$ when $x = 2$
16. $4x^2 - 3x - 5$ when $x = -3$
17. $-4x^2 - 3x - 5$ when $x = -3$

In 18-22, evaluate the expression for the given x value, and describe the order in which you performed the operations.

18. $7(x + 8)$ when $x = -3$
19. $7(5x + 8)$ when $x = 3$
20. $7(8 - 5x)$ when $x = 3$
21. $(8 - 5x)(3x + 2)$ when $x = 4$
22. $(x - 5)(x + 2)$ when $x = 10$

In 23-27, evaluate the expression for the given x value, and describe the order in which you performed the operations.

23. $\frac{36}{2x}$ when $x = 6$
24. $\frac{3x+2}{5}$ when $x = 11$
25. $\frac{7x+1}{2}$ when $x = 4$
26. $\frac{20x+10}{x}$ when $x = 2$
27. $\frac{8+\frac{3x}{x+1}}$ when $x = 4$