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The Distributive Property Assignment

Simplify the following expressions.

1. $8 - 3(2x - 5)$
2. $5(3x + 4) - 4$
3. $2(5x + 4) - 3$
4. $7(9) + 7(5)$
5. $2(5x - 1) + 14x$
6. $5(3s - 2) + 12x$
7. $7(3y - 5) + 2(4y + 3)$
8. $4(2y - 6) + 3(5y + 10)$

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The Distributive Property Assignment

9. $5(3y-2)-(7y+2)$

10. $4(5y-3)-(6y+3)$

11. $7-4[3-(4y-5)]$

12. $6-5[8-(2y-4)]$

13. $5x-3[7-2(6x-7)-3x]$

14. $6+3[2x-4(3x-2)]$

15. A total of 2000 people attended a benefit concert was held to raise money for a children foundation. Student ticket cost \$2 and an adult ticket cost \$3. If the organizer raises a total of \$5050, how many students attended the concert?

Let : $x = number\ of\ students$ $2000-x = number\ of\ adults$

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The Distributive Property Assignment

ANSWER

Simplify the following expressions:

1. $8 - 3(2x - 5)$
   $= 8 - 6x + 15$
   $= -6x + 23$

2. $5(3x + 4) - 4$
   $= 15x + 20 - 4$
   $= 15x + 16$

3. $2(5x + 4) - 3$
   $= 10x + 8 - 3$
   $= 10x + 5$

4. $7(9) + 7(5)$
   $63 + 35$
   $= 98$

5. $2(5x - 1) + 14x$
   $= 10x - 2 + 14x$
   $= 24x - 2$

6. $5(3x - 2) + 12x$
   $= 15x - 10 + 12x$
   $= 27x - 10$

7. $7(3y - 5) + 2(4y + 3)$
   $= 21y - 35 + 8y + 6$
   $= 29y - 29$

8. $4(2y - 6) + 3(5y + 10)$
   $= 8y - 24 + 15y + 30$
   $= 23y + 6$

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The Distributive Property Assignment

9. $5(3y-2)-(7y+2)$
$=15y-10-7y-2$
$=8y-12$

10. $4(5y-3)-(6y+3)$
$=20y-12-6y-3$
$=14y-15$

11. $7-4[3-(4y-5)]$
$=7-4[3-4y+5]$
$=7-4[8-4y]$
$=7-32+16y$
$=16y-25$

12. $6-5[8-(2y-4)]$
$=6-5[8-2y+4]$
$=6-5[12-2y]$
$=6-60+10y$
$=10y-54$

13. $5x-3[7-2(6x-7)-3x]$
$=5x-3[7-12x+14-3x]$
$=5x-3[21-15x]$
$=5x-63+45x$
$=50x-63$

14. $6+3[2x-4(3x-2)]$
$=6+3[2x-12x+8]$
$=6+3[8-10x]$
$=6+24-30x$
$=30-30x$

15. A total of 2000 people attended a benefit concert was held to raise money for a children foundation. Student ticket cost $2 and an adult ticket cost $3. If the organizer raises a total of $5050, how many students attended the concert?

$x = number\ of\ students$
$950 = number\ of\ students$

$2000 - x = number\ of\ adults$
$2000 - 950 = 1050 = number\ of\ adults$

$$5050 = 2x + 3(2000 - x)$$
$$5050 = 2x + 6000 - 3x$$
$$5050 - 6000 = -x$$
$$-950 = -x$$
$$950 = x$$