1. 24 divided by 2 plus 12 divided by 3 times 10
2. The mixed fraction 4 and 2 over 4 divided by the mixed fraction 7 and 2 over 8
3. The mixed fraction 5 and 2 over 3 plus the mixed fraction 7 and 5 over 12
4. Negative 3 times 8 times negative 5 times negative 8
5. Negative 8 plus negative 9
6. $10 \times$ cubed $y$ squared times the quantity $3 x y$ minus 7
7. 0 point 000000842

7b. 2 point 79 times 10 to the third power
8,. The fraction 8 over 2 equals the fraction $\times$ over 4
12. 3 times a variable $\times$ minus 27 equals 3
13. 4 times the quantity $x$ minus 3 equals 4
14. the variable $x$ minus 5 equals 3 times the quantity $x$ minus 2
15. 25 minus 3 times the quantity $x$ minus 4 equals negative 4 times the quantity $\times$ plus 5
16. 7 thousand 492
17. 0 point 0004931
19. 0 point 425
20. The diagram is made up of three figures that are connected. Starting from left to right they are as follows:

A rectangle with length of 150 feet and height of 75 feet.
A rectangle with length of 200 feet and height of 200 feet.
A triangle with base of 150 feet and height of 200 feet.
The length of both rectangles and base of the triangle all fall on the same line.
21. The diagram is a isosceles trapezoidal prism. The trapezoid that forms the base has the following dimensions: bottom equals 11 inches, height equals 4 inches, top equals 8 inches. Also the height of the prism itself is 16 inches.
22. Decimal Degree equals 25 point 8 degrees

Radians equals 0 point 213
23. A right triangle with one angle of 62 degrees. The side opposite the 62 degree angle equals $y$ and the hypotenuse equals 36 inches.
24. A right triangle with one angle of theta. The side adjacent to theta equals 15 and the hypotenuse equals 33 centimeters.
25. A right triangle with one angle of 59 degrees. The side adjacent to the 59 degree angles equals $x$ and the side opposite to the 59 degree angle equals 7 point 8 centimeters.

## Answer Key

2. the fraction 18 over 29
3. The mixed fraction 13 and 1 over 12
4. $30 x$ to the fourth power $y$ to the third power minus $70 x$ to the thirds power $y$ squared

7a. 8 point 42 times 10 to the negative 7 power
7b. 2 thousand 790
9. 12 point 5 percent
14. one half
17. 0 point 0005
18. 3 point 785
19. 26 thousand 930
20. Perimeter equal 1 thousand 400 feet, Area equals 100 thousand feet
23. y equals 67 point 70 inches
24. Theta equals 62 point 96 degrees
25. x equals 7 point 8 inches
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