

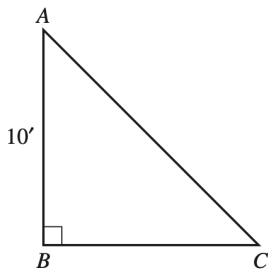
Review 1
CM/M12

2. To keep up with rising expenses, a motel manager needs to raise the \$40.00 room rate by 22%. What will be the new rate?
- F. \$40.22
G. \$42.20
H. \$48.00
J. \$48.80
K. \$62.00

4. If $7 + 3x = 22$, then $2x = ?$
- F. 5
G. 10
H. 12
J. 14
K. $\frac{58}{3}$

8. The product $(2x^4y)(3x^5y^8)$ is equivalent to:
- F. $5x^9y^9$
G. $6x^9y^8$
H. $6x^9y^9$
J. $5x^{20}y^8$
K. $6x^{20}y^8$

13. In the isosceles right triangle below, $AB = 10$ feet. What is the length, in feet, of \overline{AC} ?



- A. 5
B. 10
C. 20
D. $\sqrt{20}$
E. $10\sqrt{2}$

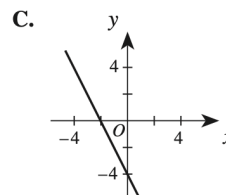
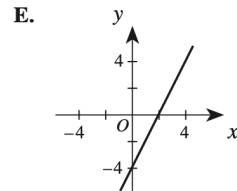
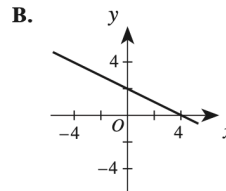
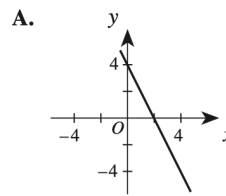
15. What polynomial must be added to $x^2 - 2x + 6$ so that the sum is $3x^2 + 7x$?

- A. $4x^2 + 5x + 6$
B. $3x^2 + 9x + 6$
C. $3x^2 + 9x - 6$
D. $2x^2 + 9x - 6$
E. $2x^2 - 5x + 6$

28. If $2x^2 + 6x = 36$, what are the possible values of x ?

- F. -12 and 3
G. -6 and 3
H. -3 and 6
J. -3 and 12
K. 12 and 15

35. Which of the following is the graph of the equation $2x + y = 4$ in the standard (x,y) coordinate plane?



38. In the standard (x,y) coordinate plane, the center of the circle shown below lies on the x -axis at $x = 4$. If the circle is tangent to the y -axis, which of the following is an equation of the circle?

- F. $(x + 4)^2 + y^2 = 4$
G. $(x - 4)^2 + y^2 = 16$
H. $(x - 4)^2 - y^2 = 16$
J. $(x - 4)^2 + y^2 = 4$
K. $x^2 + (y - 4)^2 = 16$

