1. Find the equation for the line through the points \((-2, 3)\) and \((1, 9)\).

2. Find the slope of the line \(2x + 3y = 4\).

3. Simplify: \(\frac{(x^3y^2)^2}{x^4y^3}\)

4. Simplify: \(\frac{\sqrt{x^3y^2}}{xy^{-2}}\)

5. Express the following number in scientific notation: 1,250,000.

6. Compute the following. Express your answer in scientific notation rounded to three digits.
\[(3.4 \times 10^{-4}) \times (5.8 \times 10^8)\]

7. If \(f(x) = \sin x\) and \(g(x) = 3x + \sqrt{x}\), what is \(f(g(x))\)?

8. Convert \(\frac{5\pi}{6}\) radians to degrees.

9. Consider the following right triangle:

   ![Right Triangle](image)

   What is \(\cos \theta\)?

10. Consider the following right triangle:

    ![Right Triangle](image)

    If \(\theta = 35^\circ\), what is \(a\)?
Practice Quiz B

1. Find the equation for the line through the points \((-5, 2)\) and \((-5, 4)\).

2. Find the \(x\)-intercept of the line \(3x + 4y = 9\).

3. Simplify: \(\frac{x^{1/2}}{x^{1/3}}\)

4. Simplify: \(\frac{x^3y}{x^{-1}\sqrt{y}}\)

5. Express the following number in scientific notation: 0.000325

6. Compute the following. Express your answer in scientific notation rounded to three digits.
\[
\sqrt{2.3 \times 10^{15}}
\]

7. If \(f(x) = \sqrt{x}\) and \(g(x) = x^3 + 2x\), what is \(g(f(x))\)?

8. Convert 210° to radians. Give your answer as a fraction involving \(\pi\).

9. Consider the following right triangle:

```
      13
      \
      \theta
      5
```

What is \(\tan \theta\)?

10. Consider the following right triangle:

```
      5
      \
      \theta
      a
```

If \(\theta = \frac{\pi}{3}\) radians, what is \(a\)?