

$$\textcircled{3} \quad \frac{15\sqrt{2}}{5} = \frac{5\sqrt{4}}{5}$$
$$\overbrace{(3\sqrt{2})} = \overbrace{(\sqrt{4})}$$
$$\textcircled{18 = 4}$$

$$(33) \quad (\sqrt{2a^2 - 5})^2 = (11)^2$$

$$2a^2 - 5 = 121$$

$$+ 5 \quad + 5$$

$$2a^2 = 126$$

$$a^2 = 63$$

$$a = \pm 3\sqrt{7}$$

$$(3) \quad (\sqrt{5b^2 - 36})^2 = (2b)^2$$

$$5b^2 - 36 = 4b^2$$

$$-5b^2 \quad -5b^2$$

$$-36 = -b^2$$

$$\frac{-36}{-1} = \frac{-b^2}{-1}$$

$$\sqrt{36} = \sqrt{b^2}$$

$$\cancel{6} = b$$

$$b = 6$$

Q3 $(\sqrt{x})^2 = (3\sqrt{7})^2$

$$x = 9.7$$

$$x = 63$$

$$\textcircled{4} (\sqrt{3a^2 - 32})^2 = (a)^2$$

$$\begin{array}{r} 3a^2 - 32 = a^2 \\ -3a^2 \quad -3a^2 \\ \hline \end{array}$$

$$\begin{array}{r} -32 = -2a^2 \\ \hline -2 \quad -2 \end{array}$$

$$\sqrt{16} = \sqrt{a^2}$$

$$\cancel{4} = a$$

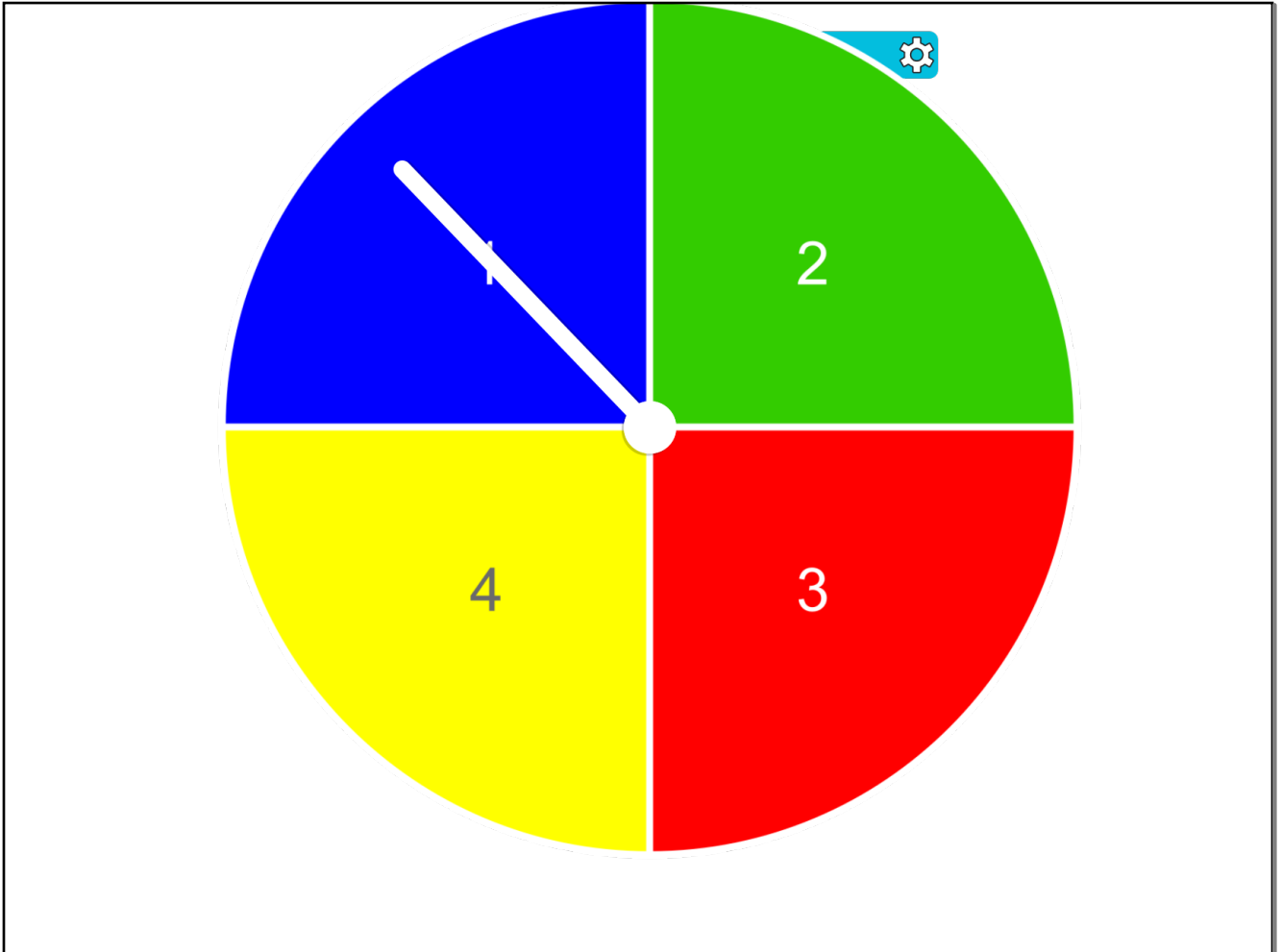
$$\textcircled{a=4}$$

$$\textcircled{5} \quad (\sqrt{8x})^2 = \left(\frac{2}{5}\right)^2$$

$$\frac{8x}{8} = \frac{4}{25 \cdot 8}$$

$$\frac{\cancel{4}}{25} \cdot \frac{1}{\cancel{8}}$$

$$x = \frac{1}{50}$$



Solve.

$$\sqrt{5x+1} - 6 = 8$$

$+6 \quad +6$

$$(\sqrt{5x+1}) = (14)$$
$$5x+1 = 196$$
$$\begin{array}{r} -1 \quad -1 \\ \hline 5x = 195 \\ \hline \frac{5x}{5} = \frac{195}{5} \\ \hline x = 39 \end{array}$$

Multiply.

$$(4 + \sqrt{7})(4 - \sqrt{7})$$

$$16 - 7$$

$$\textcircled{9}$$

Simplify.

$$\begin{aligned} & \sqrt{12} \cdot \sqrt{15} \\ & 2\sqrt{3} \cdot \sqrt{15} \\ & 2\sqrt{45} \\ & \textcircled{6\sqrt{5}} \end{aligned}$$

Simplify.

$$\sqrt{225a^4b^2c^6}$$

$$15a^2|bc^3|$$

$$15a^2|b||c|^3$$

Simplify.

$$\sqrt{16} + 3\sqrt{8} - 2\sqrt{2}$$

$$4 + \underline{6\sqrt{2}} - \underline{2\sqrt{2}}$$

$$\underline{4 + 4\sqrt{2}}$$

Simplify.

$$\sqrt{96}$$
$$2\sqrt{24}$$
$$4\sqrt{6}$$

Simplify.

$$\frac{\cancel{6}\sqrt{108}}{\cancel{108}}$$

$$\frac{\sqrt{108}}{18}$$

$$\frac{\cancel{6}\sqrt{12}}{\cancel{6}} = \frac{6\sqrt{12}}{6}$$

$$\frac{\cancel{6}\sqrt{18}}{\cancel{18}}$$

$$3\sqrt{6}$$

$$\frac{\cancel{3}\sqrt{2}}{\cancel{3}\sqrt{6}}$$

$$\frac{\sqrt{2} \cdot \sqrt{6}}{\sqrt{6} \cdot \sqrt{6}}$$

$$\frac{\sqrt{12}}{6} = \frac{\cancel{2}\sqrt{3}}{\cancel{3}6}$$

$$\frac{\sqrt{3}}{3}$$

Simplify.

$$\frac{3\sqrt{6} \cdot \sqrt{2}}{\sqrt{2} \cdot \sqrt{2}} = \frac{3\sqrt{12}}{2}$$
$$= \frac{3 \cdot 2\sqrt{3}}{2}$$
$$= 3\sqrt{3}$$

Simplify.

$$4\sqrt{2} + \sqrt{72}$$

Simplify.

$$\begin{aligned} & (\sqrt{5} + 3)^2 \\ & (\sqrt{5} + 3)(\sqrt{5} + 3) \\ & 5 + 6\sqrt{5} + 9 \\ & \textcircled{14 + 6\sqrt{5}} \end{aligned}$$

Solve.

$$\sqrt{3x + 2} = 4$$

Solve.

$$3a^2 - 108 = 0$$

Simplify.

$$\frac{(4 + \sqrt{5})(6 + \sqrt{6})}{(6 - \sqrt{6})(6 + \sqrt{6})}$$

