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19-47 every other odd
51-67 odd

$$\begin{aligned} (19) \quad \sqrt{18} &= \sqrt{9 \cdot 2} \\ &= \boxed{3\sqrt{2}} \end{aligned}$$

$$\begin{aligned} (23) \quad \sqrt{72} &= \sqrt{36 \cdot 2} \\ &= \boxed{6\sqrt{2}} \end{aligned}$$

$$\begin{aligned} (27) \quad 2\sqrt{7} \cdot \sqrt{7} &= 2 \cdot 7 \\ &= \boxed{14} \end{aligned}$$

$$\begin{aligned} (31) \quad \sqrt{12} \cdot \sqrt{2} &= \sqrt{24} \\ &= \sqrt{4 \cdot 6} \\ &= \boxed{2\sqrt{6}} \end{aligned}$$

$$\begin{aligned} (35) \quad \sqrt{\frac{1}{9}} &= \frac{\sqrt{1}}{\sqrt{9}} \\ &= \boxed{\frac{1}{3}} \end{aligned}$$

$$\begin{aligned} (39) \quad \sqrt{\frac{3}{16}} &= \frac{\sqrt{3}}{\sqrt{16}} \\ &= \boxed{\frac{\sqrt{3}}{4}} \end{aligned}$$

$$\begin{aligned} (43) \quad \frac{2}{\sqrt{3}} &= \frac{2}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} \\ &= \boxed{\frac{2\sqrt{3}}{3}} \end{aligned}$$

$$\begin{aligned} (47) \quad \sqrt{\frac{7}{8}} &= \frac{\sqrt{7}}{\sqrt{8}} \\ &= \frac{\sqrt{7}}{\sqrt{4 \cdot 2}} \\ &= \frac{\sqrt{7}}{2\sqrt{2}} \\ &= \frac{\sqrt{7}}{2\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} \\ &= \frac{\sqrt{14}}{2 \cdot 2} \\ &= \boxed{\frac{\sqrt{14}}{4}} \end{aligned}$$

$$(51) \quad x^2 = 121$$

$$\sqrt{x^2} = \pm\sqrt{121}$$

$$x = \pm 11$$

$$x = 11 \text{ or } x = -11$$

$$(53) \quad 3x^2 = 108$$

$$\frac{1}{3}(3x^2) = \frac{1}{3}(108)$$

$$x^2 = 36$$

$$\sqrt{x^2} = \pm\sqrt{36}$$

$$x = \pm 6$$

$$x = 6 \text{ or } x = -6$$

$$(55) \quad -x^2 - 12 = -87$$

$$+12 \quad +12$$

$$-x^2 = -75$$

$$x^2 = 75$$

$$\sqrt{x^2} = \pm\sqrt{75}$$

$$x = \pm\sqrt{25 \cdot 3}$$

$$x = \pm 5\sqrt{3}$$

$$x = 5\sqrt{3} \text{ or } x = -5\sqrt{3}$$

$$\textcircled{57} \frac{v^2}{25} - 1 = 11$$

$$\begin{array}{r} +1 \quad +1 \\ \hline \end{array}$$

$$\frac{v^2}{25} = 12$$

$$25 \left(\frac{v^2}{25} \right) = 25 \cdot 12$$

$$v^2 = 300$$

$$\sqrt{v^2} = \pm \sqrt{300}$$

$$v = \pm \sqrt{100} \sqrt{3}$$

$$v = \pm 10 \sqrt{3}$$

$$v = 10\sqrt{3} \text{ or } v = -10\sqrt{3}$$

$$(59) \frac{5q^2}{6} - \frac{q^2}{3} = 72$$

$$\frac{5q^2}{6} - \frac{2q^2}{6} = 72$$

$$\frac{5q^2 - 2q^2}{6} = 72$$

$$\frac{3q^2}{6} = 72$$

$$6\left(\frac{3q^2}{6}\right) = 6 \cdot 72$$

$$3q^2 = 432$$

$$\frac{1}{3}(3q^2) = \frac{1}{3}(432)$$

$$q^2 = 144$$

$$\sqrt{q^2} = \pm\sqrt{144}$$

$$q = \pm 12$$

$$q = 12 \text{ or } q = -12$$

$$\textcircled{61} \quad 4(x+1)^2 = 100$$

$$\frac{1}{4}(4(x+1)^2) = \frac{1}{4}(100)$$

$$(x+1)^2 = 25$$

$$\sqrt{(x+1)^2} = \pm\sqrt{25}$$

$$x+1 = \pm 5$$

$$x = -1 \pm 5$$

$$x = -1 + 5 \quad \text{or} \quad x = -1 - 5$$

$$x = 4 \quad \text{or} \quad x = -6$$

$$\textcircled{63} \quad 5(x-7)^2 = 135$$

$$\frac{1}{5}(5(x-7)^2) = \frac{1}{5}(135)$$

$$(x-7)^2 = 27$$

$$\sqrt{(x-7)^2} = \pm\sqrt{27}$$

$$x-7 = \pm\sqrt{9}\sqrt{3}$$

$$x-7 = \pm 3\sqrt{3}$$

$$+7 \quad +7$$

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

$$x = 7 + 3\sqrt{3} \quad \text{or} \quad x = 7 - 3\sqrt{3}$$

$$\textcircled{65} \quad 2(a-6)^2 - 45 = 53$$

$$+45 \quad +45$$

$$2(a-6)^2 = 98$$

$$\frac{1}{2}(2(a-6)^2) = \frac{1}{2}(98)$$

$$(a-6)^2 = 49$$

$$\sqrt{(a-6)^2} = \pm\sqrt{49}$$

$$a-6 = \pm 7$$

$$+6 \quad +6$$

$$a = 6 \pm 7$$

$$a = 6 + 7 \quad \text{or} \quad a = 6 - 7$$

$$a = 13 \quad \text{or} \quad a = -1$$

$$(67) (2r-5)^2 = 81$$

$$\sqrt{(2r-5)^2} = \pm\sqrt{81}$$

$$2r-5 = \pm 9$$

$$+5 \quad +5$$

$$2r = 5 \pm 9$$

$$\frac{1}{2}(2r) = \frac{1}{2}(5 \pm 9)$$

$$r = \frac{5 \pm 9}{2}$$

$$r = \frac{5+9}{2}$$

or

$$r = \frac{5-9}{2}$$

$$r = \frac{14}{2}$$

$$r = \frac{-4}{2}$$

$$r = 7$$

or

$$r = -2$$