

Reducing Fractions

Date _____ Period _____

Simplify each.

1) $\frac{3 \pm 6}{9}$

$1 \text{ and } -\frac{1}{3}$

2) $\frac{5 \pm 12}{4}$

$\frac{17}{4} \text{ and } -\frac{7}{4}$

3) $\frac{14 \pm 4}{6}$

$3 \text{ and } \frac{5}{3}$

4) $\frac{4 \pm 10}{8}$

$\frac{7}{4} \text{ and } -\frac{3}{4}$

5) $\frac{9 \pm 18i}{6}$

$\frac{3+6i}{2} \text{ and } \frac{3-6i}{2}$

6) $\frac{12 \pm 18i}{10}$

$\frac{6+9i}{5} \text{ and } \frac{6-9i}{5}$

7) $\frac{15 \pm 20i}{45}$

$\frac{3+4i}{9} \text{ and } \frac{3-4i}{9}$

8) $\frac{12 \pm 8i}{8}$

$\frac{3+2i}{2} \text{ and } \frac{3-2i}{2}$

9) $\frac{12 \pm 2\sqrt{3}}{8}$

$\frac{6+\sqrt{3}}{4} \text{ and } \frac{6-\sqrt{3}}{4}$

10) $\frac{3 \pm 18\sqrt{6}}{6}$

$\frac{1+6\sqrt{6}}{2} \text{ and } \frac{1-6\sqrt{6}}{2}$

$$11) \frac{8 \pm \sqrt{256}}{2}$$

$$12) \frac{2 \pm \sqrt{12}}{4}$$

$$12 \text{ and } -4$$

$$\frac{1 + \sqrt{3}}{2} \text{ and } \frac{1 - \sqrt{3}}{2}$$

$$13) \frac{8 \pm \sqrt{48}}{2}$$

$$14) \frac{7 \pm \sqrt{196}}{2}$$

$$4 + 2\sqrt{3} \text{ and } 4 - 2\sqrt{3}$$

$$\frac{21}{2} \text{ and } -\frac{7}{2}$$

$$15) \frac{9 \pm \sqrt{-16}}{4}$$

$$16) \frac{5 \pm \sqrt{-125}}{10}$$

$$\frac{9 + 4i}{4} \text{ and } \frac{9 - 4i}{4}$$

$$\frac{1 + i\sqrt{5}}{2} \text{ and } \frac{1 - i\sqrt{5}}{2}$$

$$17) \frac{9 \pm \sqrt{-1}}{6}$$

$$18) \frac{10 \pm \sqrt{-20}}{20}$$

$$\frac{9 + i}{6} \text{ and } \frac{9 - i}{6}$$

$$\frac{5 + i\sqrt{5}}{10} \text{ and } \frac{5 - i\sqrt{5}}{10}$$