Warm Up:

$2ab^2\sqrt[3]{90bc}$

Simplify

$\sqrt{820x^5y}$

$2 \cdot 410$

$2 \cdot 205$

$5 \cdot 41$

$2x^2\sqrt{205xy}$

$\sqrt[3]{720a^3b^7c}$

$2 \cdot 360$

$2 \cdot 180$

$2 \cdot 90$

$2 \cdot 45$

$3 \cdot 15$

$3 \cdot 5$

$\sqrt{720}$

$2^2 \cdot 3\sqrt{5}$

$12\sqrt{5}$

Multiplying Radicals

Multiply the coefficients together and the radicals together, then simplify

$3\sqrt{8} \cdot -2\sqrt{5}$

$-6\sqrt{40}$

$2 \cdot 20$

$2 \cdot 10$

$2 \cdot 5$

$-12\sqrt{10}$

$-4\sqrt{3} \cdot -\sqrt{6}$

$4\sqrt{18}$

$2 \cdot 9$

$3 \cdot 3$

$12\sqrt{2}$

$10\sqrt{6x} \cdot 3\sqrt{2x}$

$30\sqrt{12x^2}$

$2 \cdot 6$

$2 \cdot 3$

$60x\sqrt{3}$

Try these!

1) $3\sqrt{12} \cdot \sqrt{6}$

$3\sqrt{72}$

$18\sqrt{2}$

2) $\sqrt{5} \cdot \sqrt{10}$

$5\sqrt{2}$

3) $\sqrt{6} \cdot \sqrt{6}$

6

4) $\sqrt{5} \cdot -4\sqrt{20}$

-40

5) $3\sqrt{7} \cdot \sqrt{9}$

$9\sqrt{7}$

6) $-\sqrt{8} \cdot 2\sqrt{12}$

$-8\sqrt{6}$

96

$3 \wedge 32$

$2 \wedge 16$

$-4\sqrt{100}$

$-4 \cdot 10$

$-2\sqrt{96}$

Dividing Radicals

1) Simplify both separately OR
2) If possible, divide the coefficients and/or the radicals

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

$\frac{4\sqrt{8}}{2\sqrt{4}}$ $\frac{10\sqrt{27}}{2\sqrt{3}}$ $\frac{21\sqrt{64}}{7\sqrt{4}}$ $\frac{-\sqrt{3}}{2\sqrt{27}}$ $\frac{3}{27}$

$2\sqrt{2}$

$5\sqrt{9}$

$5 \cdot 3$

15

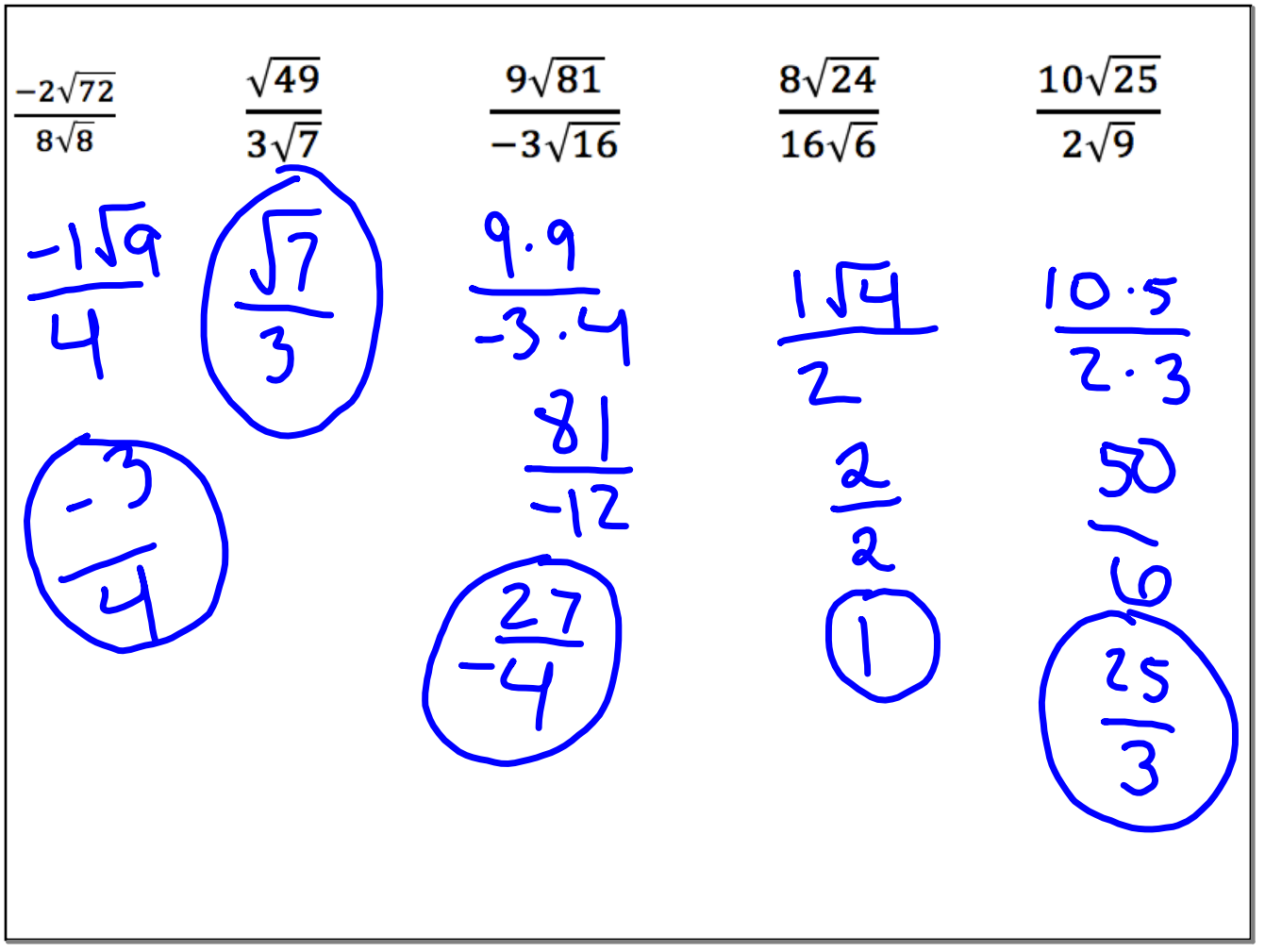
$3\sqrt{16}$

$3 \cdot 4$

12

$\frac{-1\sqrt{1}}{2\sqrt{9}}$

$\frac{-1}{6}$


$\frac{-2\sqrt{72}}{8\sqrt{8}}$
$\frac{\sqrt{49}}{3\sqrt{7}}$
$\frac{9\sqrt{81}}{-3\sqrt{16}}$
$\frac{8\sqrt{24}}{16\sqrt{6}}$
$\frac{10\sqrt{25}}{2\sqrt{9}}$
$\frac{-1\sqrt{9}}{4}$
$\frac{-3}{4}$
$\frac{\sqrt{7}}{3}$
$\frac{9 \cdot 9}{-3 \cdot 4}$
$\frac{81}{-12}$
$\frac{27}{-4}$
$\frac{1\sqrt{4}}{2}$
$\frac{2}{2}$
1
$\frac{10 \cdot 5}{2 \cdot 3}$
$\frac{50}{6}$
$\frac{25}{3}$

January 8, 2020

Joke Sheet

January 8, 2020