

* Perform the indicated operations.

2) $\frac{1}{2} + \frac{1}{7}$

8) $\frac{2}{9} \div \frac{7}{5}$

* Change to radical form. Don't simplify.

28) $625^{\frac{3}{4}}$

* Change to rational exponent form. Don't simplify.

34) $\sqrt[3]{17^2}$

* Evaluate each expression that represents a real number.

40) $169^{\frac{1}{2}}$

44) $27^{\frac{2}{3}}$

* Simplify and express answers using positive exponents only.

~~26) $(2c^4d)^{-3}$~~

56) $(2c^4d^{-2})^{-3}$

62) $\left(\frac{6mn^{-2}}{3m^{-1}n^2}\right)^{-3}$

* Write in simplified radical form.

66) $-\sqrt{125}$

82) $2a\sqrt[3]{8a^8b^{13}}$

* Perform the indicated operations.

16) $2y - 3y[4 - 2(y-1)]$

18) $(5y-1)(3-2y)$

20) $(4x-y)^2$

* Factor out, relative to the integers, all factors common to all terms.

24) $3x^5 + 6x^3 + 9x$

28) $2x(u-3y) + 5y(u-3y)$

* Factor completely, relative to the integers. If a polynomial is prime relative to the integers, say so.

44) $3y^2 - 8y - 3$

50) $9x^2 - 4$

56) $16x^2y - 8xy + y$

* Reduce each rational expression to lowest terms.

8) $\frac{x^2 + 9x + 20}{x^2 - 16}$

10) $\frac{2a^2b^4c^6}{6a^5b^3c}$

* Perform the indicated operations and reduce to lowest terms.

24) $\frac{x^2 - 9}{x^2 - 1} \div \frac{x-3}{x-1}$

34) $\frac{4x}{x^2 - y^2} + \frac{3}{x+y} - \frac{2}{x-y}$