

Homework Questions p.35 #2-24 even

$$2, 10, 16, 18, 22$$

$$2. -7 \div 21 = \frac{-7}{21} = \left(-\frac{1}{3}\right)$$

$$10. [27(-2)] \div (-3)^4$$

$$-54 \div 81$$

$$\frac{-54}{81} = \frac{-6}{9} = \left(-\frac{2}{3}\right)$$

$$16. \frac{(-12)\left(-\frac{3}{4} - \frac{2}{4}\right)}{\frac{5}{9} \div (-10)}$$

$$\frac{5}{9} \div (-10)$$

$$\frac{(-12)\left(-\frac{5}{4}\right)}{\frac{5}{9} \div (-10)} = \frac{\frac{60}{4}}{-\frac{1}{18}} = \frac{15}{-\frac{1}{18}}$$

$$15 \cdot -\frac{18}{1} = \boxed{-270}$$

$$18. \frac{\left[\frac{4}{9} - \left(-\frac{2}{9}\right)\right] \left[\frac{2}{3} - \left(-\frac{3}{3}\right)\right]^2}{\frac{5}{9} \div \left(-\frac{10}{3}\right)}$$

$$\frac{5}{9} \div \left(-\frac{10}{3}\right)$$

$$\frac{\left(\frac{6}{9}\right)\left(\frac{4}{3}\right)^2}{\frac{5}{9} \div \left(-\frac{10}{3}\right)} = \frac{\left(\frac{2}{3}\right)\left(\frac{16}{9}\right)}{-\frac{1}{6}} = \frac{\frac{32}{27} \div -\frac{1}{6}}$$

$$\frac{\frac{32}{27} \cdot -\frac{6}{1}}{1} = \boxed{\frac{-64}{9}}$$

$$22. \frac{2n^2 - 2^2}{-2} = \frac{2n^2 - 4}{-2}$$

$$\boxed{-n^2 + 2}$$

$$(-2)^2 = 4$$

$$-2^2 = -4$$

$$24. \frac{-15r^3 - 5r - 5}{-5}$$

$$\frac{-15r^3}{-5} + \frac{-5r}{-5} + \frac{-5}{-5}$$

$$\frac{-15r^3 - 5r - 5}{-5}$$

## Homework Assessment

~~9/8/10~~ 9/2

$$6. -\frac{1}{2} \div \left(\frac{1}{4}\right) \div (-4)$$

## Simplifying Expressions: putting it all together

Expressions are math statements that don't contain an equals sign. When simplifying expressions **do** what it tells you to do in the correct order.

P E M D A S  
Parenthesis ↓  
Exponents  
L → R

You don't do the opposite operation.  
That is a method for solving equations  
not simplifying expressions

$$3[9-2(5-1)]$$

$$3[9-2(4)]$$

$$3(9-8)$$

$$3(1)$$

$$\boxed{3}$$

$$3^3-4\div 2+1$$

$$27-4\div 2+1$$

$$27-2+1$$

$$\textcircled{26}$$

your turn!

$$27\div 3-3(2)$$

$$27\div 3-6$$

$$9-6=3$$

$$(9-3)^2\div 4-1$$

$$6^2\div 4-1$$

$$36\div 4-1$$

$$9-1$$

$$\textcircled{8}$$

$$4[5-(3^2-4)]$$

$$4[5-(9-4)]$$

$$4[5-(5)]$$

$$4[0]$$

$$\textcircled{0}$$

## Comparing values

simplify each side and then insert the correct symbol: <, > or =

$$2^2+2^2 \underline{<} (2^2)(2^2)$$

$$4+4 \quad 4 \cdot 4$$

$$8 \quad 16$$

$$(18 \div 6)(3) \underline{=} 18 \div (6 \div 3)$$

$$(3)(3) \quad 18 \div 2$$

$$9 \quad 9$$

your turn!

$$(3)(7) \underline{>} 12+7$$

$$21 \quad 19$$

$$27 \div 3 \underline{<} 3^2+2$$

$$9 \quad 11$$

Homework:  
p.10-11 #2-24 even, all parts!!