FACTOR:

10/17 5.1 Prime Factorization

Find all factors of 12:

1, 2, 3, 4, 6, 12

20

1, 2, 4, 5, 10, 20

Divisibility Rules: 150

A WHOLE # IS DIVISIBLE BY:

- ✓ 2 IF THE # IS EVEN
- ✓ 3 IF THE SUM OF ITS DIGITS IS DIVISIBLE BY 3
- ✓ 5 IF IT ENDS WITH A 5 OR 0
- ✓ 6 IF IT IS EVEN AND DIVISIBLE BY 3
- 9 IF THE SUM OF ITS DIGITS IS DIVISIBLE BY 9
- ✓ 10 IF IT ENDS IN 0

P. 215 #s 1-4: 2 min.

① 8 = 1, 2, 4, 8

② 9 = 1, 3, 9

③ 15 = 1, 3, 5, 15

④ 18 = 1, 2, 3, 6, 9, 18

P. 215 #s 5-8 : 1 min.

⑤ 100 = 2, 5, 10

⑥ 456 = 2, 3, 6

⑦ 783 = 3, 9

⑧ 1584 = 2, 3, 6, 9

Prime OR Composite

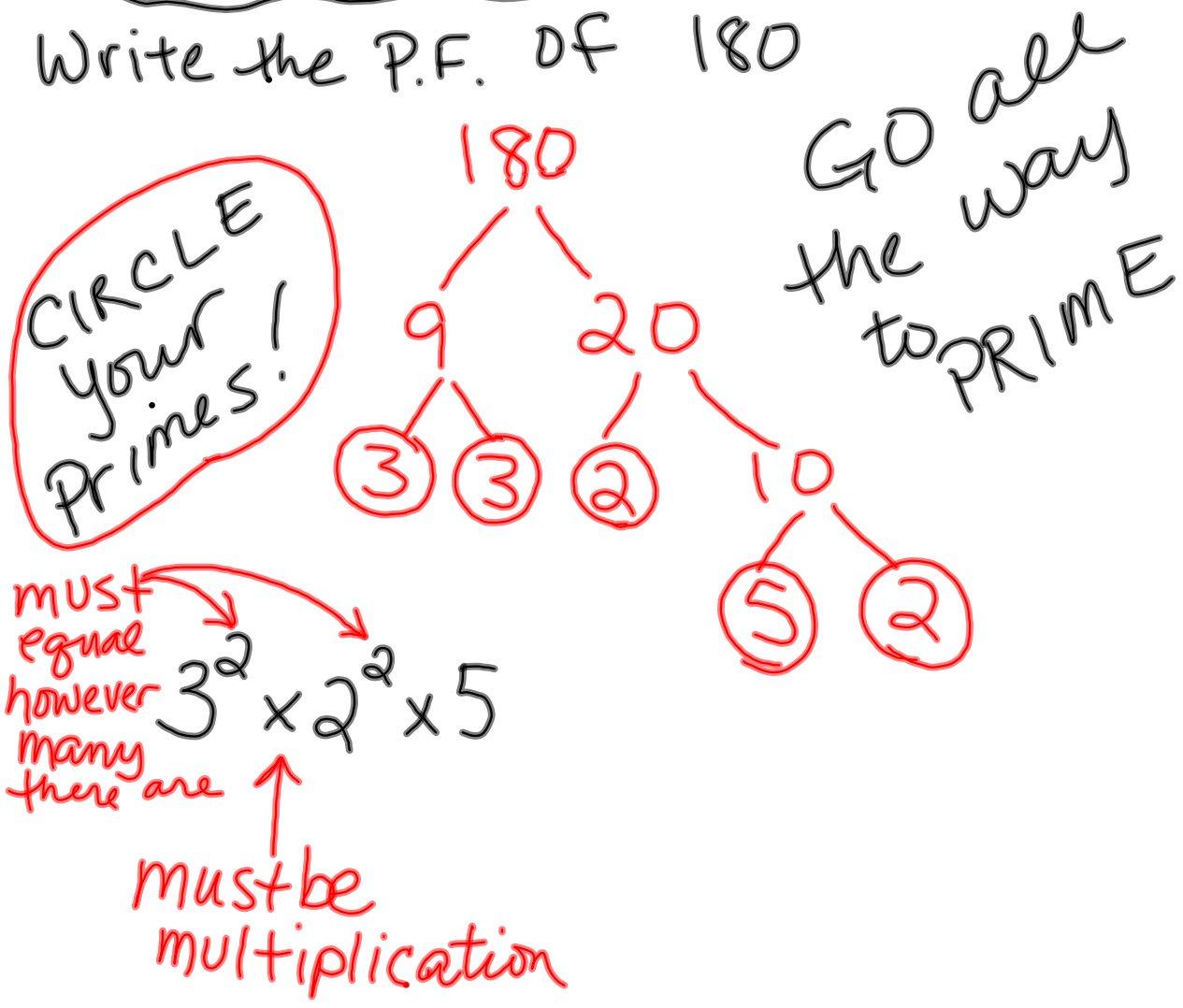
Prime #: whole # greater than 1 whose only factors are 1 & itself.

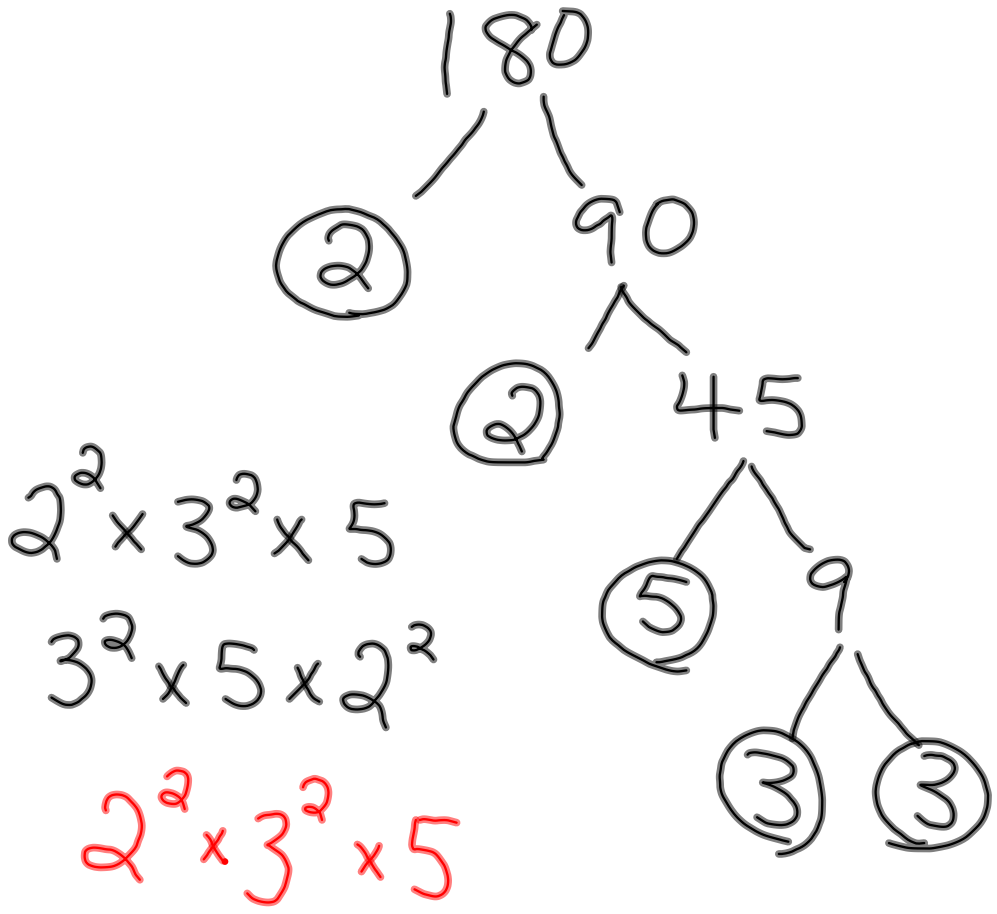
Composite #: a whole # greater than 1 that has factors OTHER than 1 & itself.

*Note: 1 is neither prime nor composite

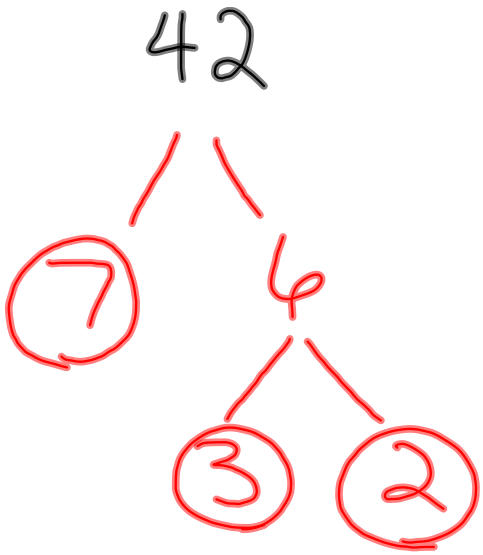
PRIME FACTORIZATION:

Write the P.F. of 180




180
2
90
2
45
5
9
3
3
$2^2 \times 3^2 \times 5$
$3^2 \times 5 \times 2^2$
$2^2 \times 3^2 \times 5$

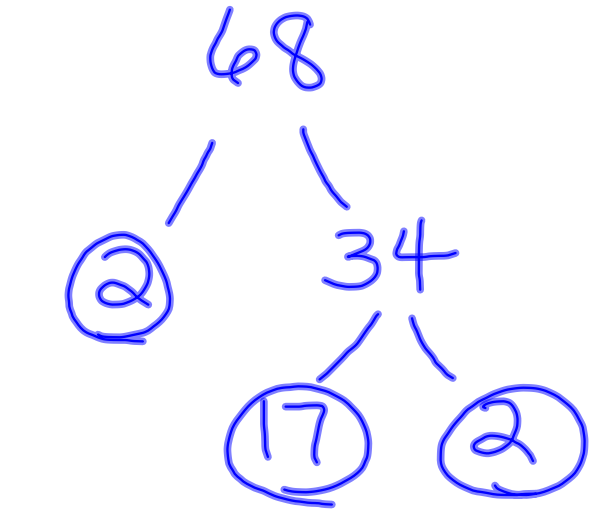
P. 216
#9



$7 \times 3 \times 2$

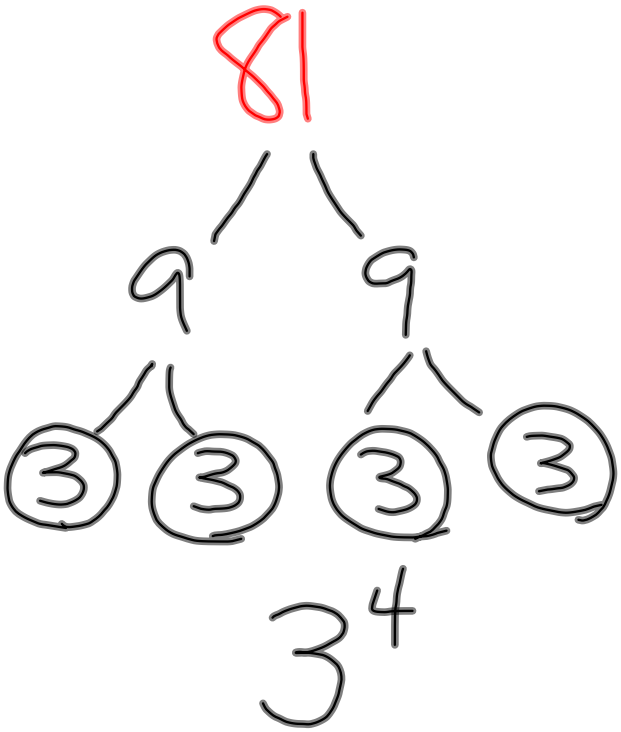
$2 \times 3 \times 7$

#10



$2^2 \times 17$

#11



In Class:

P. 217 #s 13-16
21-24
29-32
39-42

HW: WS
P. 59-60 #s 1-4 &
5-31 ODDS ONLY