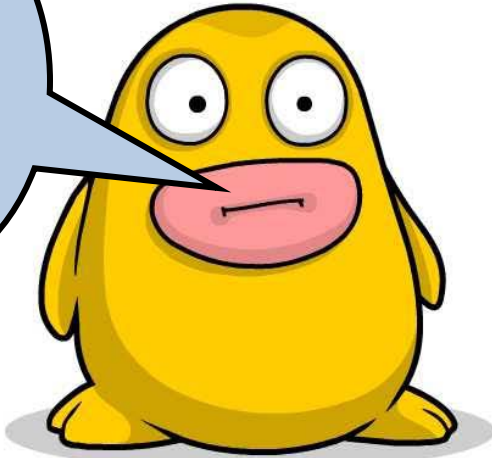


5.35 Finding Ratios that are Equivalent

Why are all these kids looking at us?



Maybe they've never seen an equivalent ratio!



These notes will help you determine if 2 ratios are equal to each other.

Ex. \$2 for 10 prints OR \$6 for 30 prints

Find their unit rate and compare:

$$\frac{\$2}{10} \div \frac{10}{10} = \frac{\$.20}{1}$$

$$\frac{\$6}{30} \div \frac{30}{30} = \frac{\$.20}{1}$$

Sweet!



Yes they are equivalent!

You don't
have to
go all 26
FO
NT
on me!

Ex:

$$\text{\$2 for 10 prints} \longrightarrow \frac{\text{\$2}}{10} \div \frac{10}{10} \longrightarrow 20\text{\cent}/\text{print}$$

$$\text{\$5 for 20 prints} \longrightarrow \frac{\text{\$5}}{20} \div \frac{20}{20} \longrightarrow 25\text{\cent}/\text{print}$$

**NO! They are NOT
equivalent!**



A different way to solve: Use **Cross Products**

Ex. \\$6 for 9 cups and \\$7 for 11 cups

$$11 \times 6 = 66$$



$$\frac{\text{\$6}}{9} \stackrel{?}{=} \frac{\text{\$7}}{11}$$

$$9 \times 7 = 63$$



NO! They are **NOT** equivalent because when you multiply their diagonals (**63, 66**) they aren't equal.