Prime Factorization

(2) $\times 4$ (2) $\times 4$
(2) $\times(2) \times(3)$

$$
2 \times 2 \times 2 \times 2 \times 2 \times 2 \quad \begin{gathered}
2 \times 2 \times 7 \\
\text { or }
\end{gathered}
$$



Multiply one from each pair they have in common.
$2 \times 2=(4)$ is the greatest
(GCF is used to reduce fractions)


Pizza shared equally with 2 people, 3 people, and 8 people How many slices? 24 because 24 is the least common multiple.

32 students in line
$\frac{1}{4}$ are girls. How many are boys?
Name That Number
5 cards $20 \%$ are black
$20 \%$ of $5=1$ How many are black?

4 out of 7 cars are red
If there are 28 cars, how many are red? If $\frac{1}{7}$ of $28=4$,

$$
\frac{4}{7}=\frac{16}{28} \text { or the } \frac{4}{7} \text { is } 4 \text { times }
$$

that amount or $4 \times 4=116$
roll I die, atipoosided disk, and flip a (in. (rediblve)
How many possible outcome

If you roll I die and flip a coin, what is the probability that you will

- roll a 2 and land on heads

$$
\frac{1}{6} \times \frac{1}{2}=\frac{1}{12}
$$

Least Common Multiple ( used to find denominator)

$$
\begin{aligned}
& \underline{28}, 56,84,112 \\
& \underline{12}, 24,36,48,60,72,84 \\
& L C M=84
\end{aligned}
$$

$$
\frac{2}{3} \text { and } \frac{3}{4} \quad \frac{2}{3}=\frac{8}{12}
$$

$$
\begin{aligned}
& 3: 3,6,9(12 \\
& 4: 4,8,6
\end{aligned} \quad \frac{3}{4}=\frac{9}{12}
$$

