

NAME: _____

An experiment has four possible outcomes: A, B, C and D.

We are given that $\Pr(A) = 0.15$ and $\Pr(D) = 0.45$.

Outcome B is seven times as likely as outcome C.

Find the probability distribution.

Outcome	Pr
A	0.15
B	$7x$
C	x
D	0.45

$$0.15 + 7x + x + 0.45 = 1$$

$$0.6 + 8x = 1$$

$$8x = 0.4$$

$$x = 0.05$$

Outcome	Pr
A	0.15
B	0.35
C	0.05
D	0.45