

2. The following table represents the employment status and gender of the civilian labor force for people ages 16 to 24 years of age (data in millions of people). Find the probability that a randomly selected person age 16 to 24 is male or employed.

Calculate the row and column totals.

<u>Gender</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
Employed	11.2	10.4	21.6
Unemployed	<u>1.6</u>	<u>1.4</u>	<u>3.0</u>
Total	12.8	11.8	24.6

$$P(\text{Male OR Employed}) = P(\text{Male}) + P(\text{Employed}) - P(\text{Male and Employed})$$

$$P(\text{Male OR Employed}) = (12.8 / 24.6) + (21.6 / 24.6) - (11.2 / 24.6)$$

$$P(\text{Male OR Employed}) = (12.8 + 21.6 - 11.2) / 24.6 = (23.2 / 24.6)$$

$$P(\text{Male OR Employed}) \sim$$

0.943
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