

110 WORKSHEET (8.3)

Name Solutions

The table below gives the distribution of favorite new movies by gender.

Movie Name	Male	Female	TOTAL
I Am Legend	500	300	800
The Golden Compass	200	250	450
August Rush	240	400	640
Enchanted	10	300	310
TOTAL	950	1250	2200

A person is selected at random from this group. What is the probability that the person selected
(Do not simplify – leave your answers in their original fractional form)

- A. is female **or** lists Enchanted as their favorite movie
 $(1250 + 10)/2200 = 1260/2200$
- B. is female **and** lists Enchanted as their favorite movie
 $300/2200$
- C. is female **given** they list Enchanted as their favorite movie
 $300/310$
- D. is male **given** they list I Am legend as their favorite movie
 $500/800$
- E. is male **or** does not list I Am Legend as their favorite movie
 $(950 + 250 + 400 + 300)/2200$
- F. lists August Rush as their favorite movie **given** they are female
 $400/1250$