

11-4 Standardized Test Prep

Conditional Probability

Multiple Choice

For Exercises 1–2, choose the correct letter.

A local bookstore classifies its books by type of reader, type of book, and cost. Use the table at the right for Exercises 1–2.

		< \$10	> \$10
Child	Fiction	120	255
	Nonfiction	35	60
Adult	Fiction	200	110
	Nonfiction	75	150

1. What is the probability that a book selected at random is a child's book, given that it costs \$15?

(A) $\frac{315}{1005}$

(B) $\frac{470}{1005}$

(C) $\frac{315}{575}$

(D) $\frac{470}{575}$

2. What is the probability that a book selected at random is fiction, given that it costs \$6?

(F) $\frac{320}{1005}$

(G) $\frac{430}{1005}$

(H) $\frac{120}{430}$

(I) $\frac{320}{430}$

Extended Response

3. Of the photographs produced in one day at a photo shop, 25% are black-and-white, and the rest are in color. Portraits make up 65% of the black-and-white photos and 45% of the color photos. Let B, C, P, and N represent black-and-white, color, portrait, and not a portrait, respectively. Draw a tree diagram to represent this situation. What is the probability that a photo chosen at random is not a portrait? Show your work.