

## Worksheet 3 Answers

1. (a) (i)  $\frac{7}{24}$   
(ii)  $\frac{13}{24}$   
(b) got cut off
2. -
3. (a) (i) 30  
(ii) 45  
(b) (i)  $\frac{7}{10}$   
(ii)  $\frac{9}{14}$   
(c) Some play both sports  
(d)  $P(A \cap B) \neq P(A) \times P(B)$   
 $\frac{30}{100} \neq \frac{75}{100} \times \frac{55}{100}$
4. (a) (i) 1  
(ii) 5  
(iii)  $p = 7$ ;  $p = 5$   
(b) (i)  $\frac{5}{8}$   
(ii)  $P(\text{art}) \times P(\text{music}) \neq P(\text{art} \cap \text{music})$   
 $\frac{12}{16} \times \frac{18}{16} \neq \frac{5}{16}$   
(c)  $\frac{7}{80}$
5. (a) .631  
(b) .299
6. (a)  $\frac{19}{50}$   
(b)  $\frac{13}{46}$
7. (a) (i)  $\frac{3}{5}$   
(ii)  $\frac{6}{11}$   
(b)  $\frac{110}{380}$
8. (a) (i)  $\frac{8}{21}$   
(ii)  $\frac{1}{6}$   
(iii)  $\frac{10}{21}$   
(b)  $\frac{10}{17}$   
(c)  $\frac{100}{399}$
9. (a)  $\frac{1}{3}$   
(b)  $\frac{4}{9}$   
(c) Neither
10. (a) fill out tree diagram  
(b) .54  
(c) .444
11. (a)  $\frac{22}{23}$   
(b) .3012
12. (a)  $a = 21$ ,  $b = 11$ ,  $c = 17$   
(b) (i)  $\frac{1}{8}$   
(ii)  $\frac{21}{32}$   
(c) (i) .253  
(ii) .747
13. (a) I  
(b) M  
(c) N
14. (a) fill out tree diagram  
(b) .294  
(c) .745