



## Maths Challenge

### Statistics Tables

This table shows the weekend cinema box office information for July 15th - 17th 2016.

Rank	Film	Weekend Gross	% change on last week	Weeks on release	Number of cinemas
1	Ghostbusters	£4,388,944	-	1	581
2	Ice Age: Collision Course	£3,780,694	-	1	570
3	The Secret Life of Pets	£2,053,623	-43%	4	601
4	The Legend of Tarzan	£1,477,249	-59%	2	521
5	Absolutely Fabulous: The Movie	£1,199,125	-49%	3	602
6	Secret Cinema	£946,086	-	1	1
7	Now You See Me 2	£876,052	-70%	2	479
8	Central Intelligence	£766,990	-43%	3	419
9	Independence Day: Resurgence	£347,438	-56%	4	351
10	The Conjuring 2	£210,703	-48%	5	260
11	Sultan	£202,815	-81%	2	88
12	The Jungle Book	£73,756	3%	14	321
13	Maggie's Plan	£67,164	-36%	2	75
14	Me Before You	£64,773	-50%	7	146
15	The Neon Demon	£46,965	-63%	2	102

Which film was being shown at the most cinemas?

Which films have been released for the most number of weeks?

Which film's weekend takings were half the previous week's takings?

What was the difference in takings between the top 2 films?

## Statistics Tables

Here is the timetable for the Peak Rail Steam Railway in Derbyshire.

Rowsley South (Depart)	1100	1214	1328	1442
Darley Dale (Arrive)	1105	1219	1333	1447
Darley Dale (Depart)	1107	1221	1335	1449
Matlock (Arrive)	1122	1236	1350	1504
Matlock (Depart)	1132	1246	1400	1514
Darley Dale (Arrive)	1147	1301	1415	1529
Darley Dale (Depart)	1149	1303	1417	1531
Rowsley South (Arrive)	1154	1308	1422	1536

Excluding stops, how long is the journey from Rowsley to Matlock?

Explain how you know if each journey takes the same time?

How many trains are needed to run the service?

How long in total is the train due to be waiting in each station between leaving Rowsley at 1100 and returning at 1536?

Explain how you can check the answers using the total time the train is travelling.