Time for Minecraft   A

Any answers more than 1 hour should be given in hours and minutes.

1. Brandon tells Miss that he did not have time to do his 20 minute maths homework over the weekend. In fact, he spent 1 hour on Minecraft. How many pieces of maths homework could Brandon have completed if he had used all his Minecraft time?

2. This is chart of the time (in minutes) Poppy spent constructing her Minecraft house – complete with swimming pool :

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
20	30	40	30	60	60	120

    a) How long did she spend during schooldays building her house?

    b) How long did she spend at the weekend?

    c) How long did she spend building her house in total?

3. Rupert is trying out Minecraft for the first time. It is now 4:50pm. At 5:20pm, Minecraft will go dark and Zombies will appear. How long does Rupert have left if he wants to log off before the Zombies can be seen.

4. Rupert is getting ready for combat by chasing a few sheep. If he finds one sheep every 5 minutes, how many can he chase in an hour?

5. The chart below shows the time Dylan and Emmanuel spent on different Minecraft servers during Saturday:

	Mineplex	Minecraft Central	Mineverse
Dylan	09:00-11:30	11:30-12:30	13:00-13:30
Emmanuel	15:00-16:30	10:00-12:00	12:00-15:00

    a) How long did each player spend playing Minecraft?

    b) Why do you think Dylan did not play Minecraft from 12:15-12:45?

    c) Bearing in mind that players have to be on the same server to battle with each other, for how long could Dylan have battled with Emmanuel on Mineverse?

    d) For how long could Dylan have battled with Emmanuel on Mineplex?

    e) Which server did Dylan spend longest on?

    f) Which server did Emmanuel spend longest on?

6. Poppy is at a Minecraft Convention. She is queueing to get the autograph of her favourite Minecraft YouTuber: Captain Sparklies. She counts 20 people in front of her. Captain Sparklies is writing one autograph every 2 minutes.

    a) How long will it be until Poppy is at the front of the queue?

    b) It is now 3:25pm. When will Poppy get his autograph?

7. John and Freddy are playing PvP (player versus player). John has 10 hearts while Freddy only has 7. John loses one heart every 5 seconds while Freddy loses a heart every 7 seconds.

    a) How long will it take for John to lose all his 10 hearts?

    b) How long will it take for Freddy to lose all his 7 hearts?

    c) Who will win the contest?

8. Sam and Benjy are playing PvP. Sam has 8 hearts and loses one every 7 seconds. Benjy has 9 hearts and loses one ever six seconds.

    a) How long will it take for Sam to lose all his 8 hearts?

    b) How long will it take for Benjy to lose all his 9 hearts?

    c) Who will win the contest?

9. Cindy Cate is an expert on Minecraft and has posted 3199 clips on YouTube. Unfortunately Cindy swears a lot and has been banned by the parents of Dylan and Amy.

Dylan decides to watch 5 minutes of Cindy Cate followed by 5 minutes Stampy Longhead before going back to Cindy for 5 mins etc. Dylan's Mum decides to checks up on him after 8 minutes, 16 minutes and 24 minutes.

a) After how many minutes does she catch him watching Cindy Cate and take his tablet away?

b) If he starts watching at 7:15pm, at what time does he lose his tablet?

Amy decides to watch 3 minutes of Cindy Cate followed by 3 minutes of The Next Step before going back to Cindy for 3 mins etc. Amy's Dad checks up on her after 4, 8 and 12 minutes.

c) After how many minutes will Dad catch Amy watching Cindy and take her tablet?

d) Amy starts watching at 8:32pm. At what time will she lose her tablet?

10. A Minecraft convention is being held at Peterborough and starts at 09:00 near Peterborough station. This is train timetable of early morning trains.

Nuneaton	05:00	06:02	07:06	07:36	08:36
Leicester	05:24	06:26	07:30	08:00	08:30
Oakham	05:52		07:58	08:28	08:58
Stamford	06:05		08:11	08:41	09:11
Peterborough	06:19	07:15	08:25	08:55	09:25
March	06:34	07:30	08:43	09:13	09:43

a) Stephen lives in Leicester and wants to arrive at the convention before 09:00. Which train should he catch?
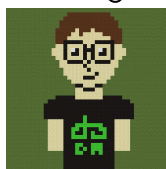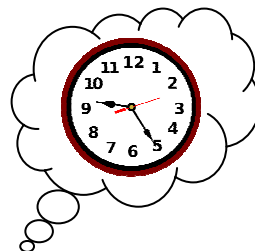
b) How long will Stephen's journey take?

c) Bill catches the 08:36 train from Nuneaton. How many minutes late for the convention will he be?

d) Ruby catches the 08:11 from Stamford. How long is her train journey?

e) How long will she have to wait in Peterborough before the convention starts?

f) Simon arrives at Leicester station at 06:35. How long does he have to wait for his train.

Time for Minecraft   AA

Any answers more than 1 hour should be given in hours and minutes.

1. Brandon tells Miss that he did not have time to do his 20 minute maths homework over the weekend. In fact, he spent 2hrs 10mins on Minecraft. How many pieces of maths homework could Brandon have completed if he had used all his Minecraft time?

2. This is chart of the time Poppy spent constructing her Minecraft house – complete with swimming pool:

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
25	30	45	24	60	75	126

   a) How long did she spend during schooldays building her house?

   b) How long did she spend at the weekend?

   c) How long did she spend building her house in total?

3. Rupert is trying out Minecraft for the first time. It is now 4:25pm. At 5:20pm, Minecraft will go dark and Zombies will appear. How long does Rupert have left if he wants to log off before the Zombies can be seen.

4. Rupert is getting ready for combat by chasing a few sheep. If he finds one sheep every 4 minutes, how many will he chase in an hour?

5. The chart below shows the time Dylan, Emmanuel and Hassan spent on different Minecraft servers during Saturday:

	Mineplex	Minecraft Central	Mineverse
Dylan	09:00-11:30	11:30-12:15	12:45-13:30
Emmanuel	15:00-16:30	10:00-12:00	12:00-15:00
Hassan	08:20-09:30	09:30-13:00	13:30-16:40

   a) How long did each player spend playing Minecraft?

   b) Why do you think Dylan did not play Minecraft from 12:15-12:45?

   c) Bearing in mind that players have to be on the same server to battle with each other, for how long could Dylan have battled with Emmanuel on Mineverse?

   d) For how long could Dylan have battled with Hassan on Mineverse?

   e) For how long could Dylan have battled with Emmanuel on Mineplex?

   f) On which server and for how long could all 3 players have battled together?

6. Poppy is at a Minecraft Convention. She is queueing to get the autograph of her favourite Minecraft YouTuber: Captain Sparklies. She counts 40 people in front of her. Captain Sparklies is writing one autograph every 4 minutes.

   a) How long will it be until Poppy is at the front of the queue?

   b) It is now 3:25pm. When will Poppy get his autograph?

7. John and Freddy are playing PvP (player versus player). Each starts with 10 hearts. When one of them loses all his hearts, the other player wins. John loses his first heart after 6 seconds and then another heart every 4 seconds. Freddy loses his first heart after 12 seconds and then another heart every 3 seconds.

   a) Who will win the PvP?

   b) How long will the contest take?

   c) How many hearts will the winner have left?

8. Sam and Benjy are playing PvP each starting with 10 hearts. Sam loses his first heart after 7 seconds and then one heart every 6 seconds. Benjy has lost 3 hearts after 8 seconds. He then loses a heart every 7 seconds.

a) Who will win the PvP?

b) How long will the contest take?

c) How many hearts will the winner have left?

9. Cindy Cate is an expert on Minecraft and has posted 3199 clips on YouTube. Unfortunately Cindy swears a lot and has been banned by the parents of Dylan, Amy and Roger.

Dylan decides to watch 5 minutes of Cindy Cate followed by 5 minutes of 5 minutes of Stampy Longhead before going back to Cindy for 5 mins etc. Dylan's Mum decides to check up on him at the end of every 8th minute.

Amy decides to watch 3 minutes of Cindy Cate followed by 3 minutes of The Next Step before going back to Cindy etc. Amy's Dad will check up on her at the end of every 10th minute.

Roger decides to watch 1 minute of Cindy Cate followed by 1 minute of Bear Grylls; then 2 minutes of Cindy Cate followed by 2 minutes of Bear Grylls and so on. Roger's Mum decides to leave him for 11 minutes and then check up on him every prime number of minutes (starting at the end of the 11th minute)

a) How long will it be before each child has their tablet confiscated?

b) Who will keep their tablet for the longest?

c) How many minutes of Cindy Cate will each child watch?

d) Dylan starts watching at 6.30pm, Amy at 7:50pm and Roger at 8:20. At what time will each child lose their tablet?

10. A Minecraft convention is being held at Peterborough and starts at 09:00 near Peterborough station. This is train timetable of early morning trains.

Nuneaton	05:00	06:02	07:06	07:36	08:36
Leicester	05:24	06:26	07:30	08:00	08:30
Oakham	05:52		07:58	08:28	08:58
Stamford	06:05		08:11	08:41	09:11
Peterborough	06:19	07:15	08:25	08:55	09:25
March	06:34	07:30	08:43	09:13	09:43

a) Stacey lives in Oakham. She wants to arrive before the convention begins. What is the latest train she can catch?

b) How long will her journey take?

c) Simon lives in Stamford. He wants to meet his friend for breakfast at McDonalds in Peterborough at 08:00. Which train should he catch?

d) Morgan wants to be near the front of the queue at the convention. He takes the 05:52 from Oakham. How long is his train journey?

e) How long will Morgan have to wait in Peterborough before the convention doors open?

f) John catches the 05:24 from Leicester. Siegfried catches the 06:26. How long is each journey?

g) Mark catches the 07:58 from Oakham but becomes so engrossed playing Minecraft that he ends up in March. It takes him 5 minutes to find a taxi which then takes 15 minutes to get to Peterborough. What time does he arrive in Peterborough?

Time for Minecraft   AAA

Any answers more than 1 hour should be given in hours and minutes.

1. Brandon tells Miss that he did not have time to do his 25 minute maths homework over the weekend. In fact, he spent 3hrs 15mins on Minecraft. How many pieces of maths homework could Brandon have completed if he had used all his Minecraft time?

2. This is chart of the time Poppy spent constructing her Minecraft house.

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
23	36	45	29	63	75	124

   a) How long did she spend during schooldays building her house?

   b) How long did she spend at the weekend?

   c) How long did she spend building her house in total?

3. Rupert is trying out Minecraft for the first time. It is now 2:25pm. At 5:20pm, Minecraft will go dark and Zombies will appear. How long does Rupert have left if he wants to log off before the Zombies can be seen.

4. Rupert is getting ready for combat by chasing a few sheep. If he finds one sheep every 2½ minutes, how many will he chase in an hour?

5. The chart below shows the time Dylan, Emmanuel and Hassan spent on different Minecraft servers during Saturday:

|	Mineplex	Minecraft Central	Mineverse
Dylan	09:06-11:30	11:30-12:17	12:45-13:33
Emmanuel	15:24-16:30	10:10-12:00	12:00-15:24
Hassan	08:20-09:30	09:30-13:00	13:30-16:40

   a) How long did each player spend playing Minecraft?

   b) Why do you think Dylan did not play Minecraft from 12:17-12:45?

   c) Bearing in mind that players have to be on the same server to battle with each other, for how long could Dylan have battled with Emmanuel on Mineverse?

   d) For how long could Dylan have battled with Hassan on Mineplex?

   e) For how long could Dylan have battled with Emmanuel on Mineplex?

   f) On which server and for how long could all 3 players have battled together?

6. Sarah is at a Minecraft Convention. She is queueing to get the autograph of her favourite Minecraft YouTuber: Captain Sparklies. She counts 50 people in front of her. Captain Sparklies is writing one autograph every 2½ minutes.

   a) How long will it be until Poppy is at the front of the queue?

   b) It is now 3:25pm. When will Poppy get Captain Sparklies' autograph?

7. John and Freddy are playing PvP (player versus player). Each starts with 10 hearts. When one of them loses all his hearts, the other player wins. John loses his first heart after 6 seconds and then another heart every 4 seconds. Freddy loses his first heart after 12 seconds and then another heart every 3 seconds.

   a) Who will win the PvP?

   b) How long will the contest take?

   c) How many hearts will the winner have left?

8. Sam, Benjy and Martin are playing 3-way PvP each starting with 10 hearts. **Sam** loses his first heart after 7 seconds and then one heart every 6 seconds. **Benjy** has lost 3 hearts after 8 seconds. He then loses a heart every 7 seconds. **Martin** has lost his first 6 hearts after 14 seconds. He then loses a heart every 13 seconds.

   a) Who will win the PvP?

   b) How long will the contest take?

   c) Who is the first player to lose all his hearts?

   d) How many hearts will the winner have left?

9. Cindy Cate is an expert on Minecraft and has posted 3199 clips on YouTube. Unfortunately Cindy swears a lot and has been banned by the parents of Dylan, Amy and Roger.

    Dylan decides to watch 5 minutes of Cindy Cate followed by 5 minutes of 5 minutes of Stampy Longhead before going back to Cindy for 5 mins etc. Dylan's Mum decides to check up on him at the end of every 8th minute.

    Amy decides to watch 3 minutes of Cindy Cate followed by 3 minutes of The Next Step before going back to Cindy etc. Amy's Dad will check up on her at the end of every 10th minute.

    Roger decides to watch 1 minute of Cindy Cate followed by 1 minute of Bear Grylls; then 2 minutes of Cindy Cate followed by 2 minutes of Bear Grylls and so on. Roger's Mum decides to leave him for 11 minutes and then check up on him every prime number of minutes (starting at the end of 11th minute)

    a) How long will it be before each child has their tablet confiscated?

    b) Who will keep their tablet for the longest?

    c) How many minutes of Cindy Cate will each child watch?

    d) Dylan starts watching at 6.34pm, Amy at 7:53pm and Roger at 8:22pm. At what time will each child lose their tablet?

10. A Minecraft convention is being held at Peterborough and starts at 09:00 near Peterborough station. This is train timetable of early morning trains.

Nuneaton	05:00	06:02	07:06	07:36	08:36
Leicester	05:24	06:26	07:30	08:00	08:30
Oakham	05:52		07:58	08:28	08:58
Stamford	06:05		08:11	08:41	09:11
Peterborough	06:19	07:15	08:25	08:55	09:25
March	06:34	07:30	08:43	09:13	09:43
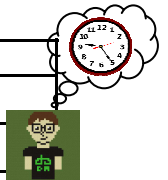
St Albans City	04:14	05:15	05:45	06:16	06:45
Luton	04:29	05:29	05:59	06:29	06:59
Kettering	05:06	06:06	06:36	07:06	07:36
Leicester	05:29	06:29	06:59	07:29	07:59
Derby	06:04	07:04	07:34	08:04	08:34

a) Nigel wants to be near the front of the queue when the doors open and so catches the 05:52 from Oakham. How long is his train journey?

b) How long does he have to wait in Peterborough before the convention doors open?

c) Ravi lives in Luton. He wants to in Peterborough before 09:00. Which trains should he catch?

d) Stacey catches the 06:16 from St Albans City. What is the earliest time she will be Peterborough?

e) The 05:00 and 06:02 trains from Nuneaton both stop at Peterborough. How long does each train take?

f) Both the 05:00 and 06:02 trains use the same type of train. Explain why one is a quicker journey.

g) Hassan catches the 08:00 train from Leicester. Unfortunately he falls asleep on the train and wakes up in March. He finds out the return train leaves 22 minutes after he arrived in March. Estimate when he will finally arrive in Peterborough.

h) Miles lives in Kettering. He catches the 05:06 train. When will he arrive in Peterborough?

i) Make up 2 questions for a partner using the train timetables.

11. Justin, Steve and Michael are playing 3-way PvP each starting with 10 lives. Half way through the contest, Justin has 6 lives left, Steve 9 and Michael 4. From that point, **Justin** loses a life every 13 seconds, **Steve** every 9 seconds and **Michael** every 19 seconds.

a) Who will win the contest?

b) Who will be the first player to be eliminated?

c) How long did the **whole contest** last? Give your answer in minutes and seconds.

Answers

A
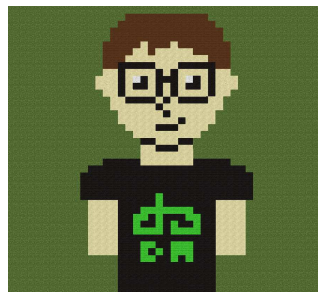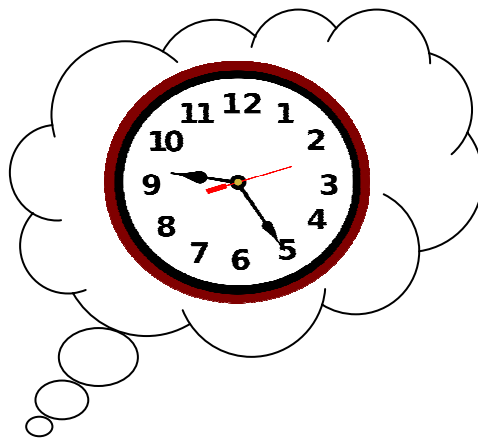
1. 3
2. a) 3hrs   b) 2hrs   c) 5hrs
3. 30 mins
4. 12
5. a) Dylan 3hrs; Emmanuel 6hrs 30mins b) eating lunch   c) 30 mins   d) 0 mins
   e) Mineplex   f) Mineverse
6. a) 40 mins   b) 4:05pm
7. a) 50 secs   b) 49 secs   c) John
8. a) 56 secs   b) 54 secs   c) Sam
9. a) 24 mins   b) 7:39pm   c) 8 mins   d) 8:40pm
10. a) 07:30   b) 55 mins   c) 25 mins   d) 14 mins   e) 35 mins   f) 55 mins

AA

1. 6
2. a) 3hrs 4 mins   b) 3hrs 21 mins c) 6hrs 25 mins
3. 55 mins
4. 15
5. a) Dylan 3hrs; Emmanuel 6hrs 30mins; Hassan 7hrs 50mins   b) eating lunch c) 45 mins
   d) 30 mins   e) 0 mins   f) Minecraft Central 30 mins
6. a) 2hrs 40mins b) 6:05pm
7. a) John   b) 39 secs   c) 1
8. a) Sam   b) 57 secs   c) 1
9. a) Dylan 24 mins; Amy 20 mins Roger 13 mins   b) Dylan   c) Dylan 14 mins Amy 11
   mins Roger 7 mins   d) Dylan 6:54pm; Amy 8:10pm; Roger 8:33pm
10. a) 08:28   b) 27 mins   c) 06:05   d) 27 mins   e) 2hrs 41 mins
   f) John 55 mins Siegfried 49 mins   g) 10:03

AAA

1. 7
2. a) 3hr 16 mins b) 3hr 19 mins c) 6hrs 35 mins
3. 2hrs 55 mins
4. 24
5. Dylan 3hr 59 mins   Emmanuel 6hr 20 mins Hassan 7hr 50 mins   b) eating lunch
   c) 48 mins   d) 3 mins   e) 0 mins   f) Minecraft Central 30 mins
6. a) 2hr 5 mins   b) 5:30pm
7. a) John   b) 39 secs   c) 1
8. a) Martin   b) 61 secs   c) Benjy   d) 1
9. a) Dylan 24 mins; Amy 20 mins Roger 13 mins   b) Dylan   c) Dylan 14 mins Amy 11
   mins Roger 7 mins   d) Dylan 6:58pm; Amy 8:13pm; Roger 8:35pm
10. a) 27 mins   b) 2hr 41 mins c) 06:29 or 06:59 then 08:00 from Leicester   d) 08:25
   e) 05:00 – 1hr 19 mins 06:02 – 1hr 13 mins   f) 06:02 doesn't stop at Oakham &
   Stamford.   g) 09:53   h) 07:15
11. a) Steve   b) Michael   c) 2mins 36 secs